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**TITLE 326 AIR POLLUTION CONTROL BOARD**

**Proposed Rule**  
LSA Document #05-330

**DIGEST**

Amends [326 IAC 3-4-1](#), [326 IAC 3-4-2](#), [326 IAC 3-4-3](#), [326 IAC 3-5-1](#), [326 IAC 3-5-2](#), [326 IAC 3-5-3](#), [326 IAC 3-5-4](#), [326 IAC 3-5-5](#), [326 IAC 3-5-6](#), [326 IAC 3-5-7](#), [326 IAC 3-5-8](#), [326 IAC 3-6-1](#), [326 IAC 3-6-2](#), [326 IAC 3-6-3](#), [326 IAC 3-6-4](#), [326 IAC 3-6-5](#), [326 IAC 3-6-6](#), [326 IAC 3-7-1](#), [326 IAC 3-7-2](#), [326 IAC 3-7-3](#), [326 IAC 3-7-4](#), and [326 IAC 3-7-5](#) concerning compliance monitoring. Amends [326 IAC 7-2-1](#) concerning sulfur dioxide compliance requirements. Effective 30 days after filing with the Publisher.

**HISTORY**

First Notice of Comment Period: December 1, 2005, Indiana Register (29 IR 899).

Second Notice of Comment Period: March 31, 2010, Indiana Register (DIN: [20100331-IR-326050330SNA](#)).

Notice of First Hearing: March 31, 2010, Indiana Register (DIN: [20100331-IR-326050330PHA](#)).

Continuation of Second Notice of Comment Period: May 12, 2010, Indiana Register (DIN: [20100512-IR-326050330SCA](#)).

Change in Notice of First Hearing: August 4, 2010, Indiana Register (DIN: [20100804-IR-326050330CHA](#)).

Change in Notice of First Hearing: October 20, 2010, Indiana Register (DIN: [20101020-IR-326050330CHA](#)).

Date of First Hearing: December 1, 2010.

**PUBLIC COMMENTS UNDER [IC 13-14-9-4.5](#)**

[IC 13-14-9-4.5](#) states that a board may not adopt a rule under [IC 13-14-9](#) that is substantively different from the draft rule published under [IC 13-14-9-4](#) until the board has conducted a third comment period that is at least 21 days long.

**REQUEST FOR PUBLIC COMMENTS**

This proposed (preliminarily adopted) rule is substantively different from the draft rule published on March 31, 2010 at DIN: [20100331-IR-326050330SNA](#). The Indiana Department of Environmental Management (IDEM) is requesting comment on the entire proposed (preliminarily adopted) rule.

The proposed rule contains numerous changes from the draft rule that make the proposed rule so substantively different from the draft rule that public comment on the entire proposed rule is advisable. This notice requests the submission of comments on the entire proposed rule, including suggestions for specific amendments. These comments and the department's responses thereto will be presented to the board for its consideration at final adoption under [IC 13-14-9-6](#). Mailed comments should be addressed to:

#05-330 (APCB) Compliance Monitoring  
Susan Bem Mail Code 61-50  
Rule and SIP Development Section  
Office of Air Quality  
Indiana Department of Environmental Management  
100 North Senate Avenue  
Indianapolis, Indiana 46204

Hand delivered comments will be accepted by the receptionist on duty at the tenth floor reception desk, Office of Air Quality, 100 North Senate Avenue, Indianapolis, Indiana.

Comments may be submitted by facsimile at the IDEM fax number: (317) 233-5967, Monday through Friday, between 8:15 a.m. and 4:45 p.m. Please confirm the timely receipt of faxed comments by calling the Rule and State Implementation Plan Development Section at (317) 234-6530.

**COMMENT PERIOD DEADLINE**

Comments must be postmarked, faxed, or hand delivered by February 9, 2011.

**SUMMARY/RESPONSE TO COMMENTS FROM THE SECOND COMMENT PERIOD**

IDEM requested public comment from March 31, 2010, through June 11, 2010, on IDEM's draft rule language. IDEM received comments from the following parties:

Eli Lilly and Company (ELC)  
Bingham McHale (CASE Coalition) (BM)  
Indiana Energy Association/Indiana Utility Group (IUG)  
Indianapolis Power and Light Company (IPL)  
Barnes and Thornburg on behalf of Indianapolis Power and Light Company (BT)

Alcoa Inc./Alcoa Power Generating Inc. (Alcoa)

Indiana Chamber of Commerce (ICC)

Indiana Manufacturers Association, Inc. (IMA)

Following is a summary of the comments received and IDEM's responses thereto:

*Comment:* The commenter supports the comments filed by the Indiana Manufacturers Association and the Indiana Energy Association. (ICC)

*Response:* IDEM acknowledges the support.

*Comment:* The long delay in the rulemaking schedule between the First Notice of Comment Period and the Second Notice of Comment Period sets a bad precedent and suggests that IDEM and stakeholders, including potentially affected sources, may be better served by starting a new rulemaking process given that personnel (both at IDEM and within the stakeholder community) and driving regulatory issues have changed during that time. (ICC)

*Comment:* While IDEM is under no statutory time frame in which a proposed rule may be subject to the promulgation process, the commenter does not understand the wisdom in not beginning the process anew given the 51 month delay. (IUG)

*Response:* IDEM believes that starting this rulemaking over would only delay the rulemaking longer. The Second Notice of Comment Period is still early in the rulemaking schedule to allow enough time for public input. The Second Notice of Comment Period, which was published earlier this year, is the first time the public has an opportunity to review draft rule language.

*Comment:* If IDEM elects to move forward with this rulemaking, IDEM should convene a workgroup comprised of interested stakeholders to lay out the proposed rule and seek input on the many complicated sections of the proposal. (ICC)

*Comment:* It would be helpful to review the minutes derived from a stakeholder meeting held on March 15, 2007, to ensure that the discussions from that meeting are captured in the context of this rulemaking. There is a lack of information regarding why the changes in this rulemaking are necessary. (IUG)

*Response:* IDEM held an interested parties meeting on September 8, 2010, to discuss this rulemaking. Minutes from the March 15, 2007 meeting are not available. These changes are necessary for state implementation plan (SIP) approvability and to clarify/update the compliance monitoring rules.

*Comment:* The commenter appreciates that IDEM extended the Second Notice of Comment Period so that others can comment in a more detailed manner. (IMA)

*Response:* IDEM appreciates the support for an extension of comment period.

*Comment:* Consistency with federal compliance monitoring rules is of the utmost importance. Instances where an IDEM provision could overlap with a federal provision requiring a more stringent result should be eliminated unless a specific situation exists to warrant the deviation. (IMA)

*Comment:* Being regulated by conflicting federal and state standards is not only confusing but is costs Indiana facilities additional money to ensure and report compliance with both standards. Compelling reasons must exist for varying from the federal standards. (BM)

*Comment:* IDEM should take the opportunity afforded by opening up the compliance monitoring rules to ensure that the Indiana rules are consistent with federal compliance monitoring rules, in particular the monitoring rules found in federal NSPS and NESHAP rules. (ELC)

*Response:* IDEM discussed this issue with interested parties at the September 8, 2010 meeting. IDEM understands the frustration with overlapping requirements, but in some instances this is necessary. IDEM has reviewed overlapping requirements and has addressed as appropriate in each of the specific comments made on this issue.

*Comment:* Two of the three primary purposes IDEM identified with this rulemaking are (1) changes that U.S. EPA requested and (2) to allow the use of PM CEMS in lieu of COMs. Changes should be limited to only those two and that the other changes should be addressed in a different rulemaking. In addition, it is not clear whether other changes were discussed in the First Notice of Comment Period. (IPL) (BT) (IUG)

*Response:* The changes that IDEM is proposing update and clarify compliance monitoring requirements in [326 IAC 3](#) and [326 IAC 7-2-1](#), which are all within the scope of this rulemaking.

*Comment:* In many instances IDEM is proposing to add the term "sources and emissions units." In some instances, this is improper. For example, in many instances, IDEM changes rules that apply to "facilities" and substitutes "sources and emissions units." Not all emissions units at a source may be subject to [326 IAC 3](#). (IPL) (BT) (IUG)

*Response:* IDEM agrees that not all emissions units at a source may be subject to [326 IAC 3](#). The only instances IDEM inserted "sources and emissions unit" is in [326 IAC 3-5-1](#) and [326 IAC 3-5-3](#). In most instances IDEM inserted "sources or emission units" in the draft rule language. IDEM has deleted [326 IAC 3-5-1\(a\)](#) of the current rule language in the rule for preliminary adoption because the introductory language is not necessary as discussed in a subsequent comment. IDEM has revised the language at the new [326 IAC 3-5-1\(a\)](#) and (b) in the rule for preliminary adoption to say "sources or emissions units". IDEM feels it is appropriate to include both term, "sources" and "emissions units", in this section because some of the thresholds for applicability are based on

emissions units and others are based on plant production, for example, sulfuric acid plants. IDEM made changes throughout the draft rule for preliminary adoption to make it clear that requirements for affected emissions units do not necessarily apply to other emission units at the source. Some "source or emissions units" were left as is because it did not appear to change the meaning.

*Comment:* Why are definitions from the federal Compliance Assurance Monitoring (CAM) rules set out at 40 CFR 64 that are incorporated by reference at [326 IAC 3-8-1](#), being added? (IUG)

*Response:* Not all sources subject to Article 3 are CAM sources. These terms are used in Article 3 and were not previously defined. IDEM is proposing to delete the definition of "potential to emit" in the draft rule language for preliminary adoption because this CAM definition is not needed. While this term is referenced in the applicability of NO<sub>x</sub> sources in Clark and Floyd counties applicability is ultimately determined by applicability language in Article 10.

*Comment:* IDEM should rely on existing definitions already provided in 326 IAC wherever possible and not create separate definitions in Article 3. (IUG)

*Response:* IDEM agrees and has deleted the definition of "major source", "owner or operator", "control device", and "inherent process equipment" in the draft rule for preliminary adoption. IDEM did not delete the definition for "emissions unit", but instead referenced the definition already included in Article 1 because it is defined in both Article 1 and Article 2-7. The definition of "permit" was revised to refer to [326 IAC 2](#) instead of referring to individual rules.

*Comment:* Delete the phrase "as specified by the U.S. EPA pursuant to regulations under Section 412 of the Clean Air Act" in the definition of "Continuous emissions monitoring system" in [326 IAC 3-4-1](#). Section 412 of the Clean Air Act addresses the Acid Rain program and having this language is confusing, because it appears to limit the definition of CEMS only to those units that are regulated under the Acid Rain provisions. That does not appear to be the intent of the agency when drafting this definition. (ELC)

*Response:* IDEM agrees and has deleted the phrase in the draft rule for preliminary adoption.

*Comment:* The proposed definition for "boiler operating day" in the draft rule language at [326 IAC 3-4-1](#)(1) should be "the twenty-four (24) hour period", not "a twenty-four (24) hour period", and "during" should be added to "combusted during the entire twenty-four (24) hour period." (BM)

*Comment:* The proposed definition for "boiler operating day" in the draft rule language at [326 IAC 3-4-1](#)(1) conflicts with the calculation provided for in the state implementation plan (SIP) for SO<sub>2</sub> and NO<sub>x</sub>. It appears the only reference to "boiler operating day" in Article 3 is the proposed language at [326 IAC 3-5-1](#)(c)(iv)(AA). (IUG)

*Response:* The term "boiler operating day" is not needed in the proposed language for PM CEMS at [326 IAC 3-4-1](#)(1). The definition and use in [326 IAC 3-4-1](#)(1) has been deleted in the draft rule for preliminary adoption.

*Comment:* While the definition of "control device" in 40 CFR Part 64 includes acid plants and sulfur recovery plants, inclusion of the same in definition of "control device" in [326 IAC 3-4-1](#) does not appear to be necessary or relevant. (BM)

*Response:* The definition of "control device" was deleted in the draft rule for preliminary adoption to address the concern expressed in a previous comment to rely on existing definitions already provided in 326 IAC wherever possible.

*Comment:* The definition of "emission limitation or standard" proposed in [326 IAC 3-4-1](#)(8)(A) differs from the definition found in 40 CFR Part 64. It expands the definition to applicable requirements other than those listed in subsection (A)(i) through (A)(iii) of the draft rule by including the phrase "including the following." Additionally, the proposed definition omits examples of general operational requirements that are exempted from the definition. Moreover, the draft rule at [326 IAC 3-4-1](#)(8) confusingly states "as defined under the CAA" and should be rephrased as "contained in this title." Lastly, [326 IAC 3-4-1](#)(8)(B) omits that an emission limitation or standard may be expressed as a work practice, process, or control device parameter. (BM)

*Response:* IDEM has deleted the phrase "including the following" from the proposed language for preliminary adoption. IDEM did not include the example of operational requirements in [326 IAC 3-4-1](#)(6)(C) (updated citation in the proposed language for preliminary adoption) because IDEM does not typically list examples in rule language. While IDEM agrees the use of the word "defined" could be confusing, since this is in reference to limitations and standards established or regulated in the CAA, IDEM has kept the use of the word "defined" to be consistent with the CAM definition. IDEM believes that the suggestion to say "in this title" is inappropriate given that there may be provisions in the CAA that are not contained in Title 326. IDEM has reworked [326 IAC 3-4-1](#)(6)(B) to be consistent with the language in 40 CFR 64.

*Comment:* Clarify the proposed definition of "exceedance" in [326 IAC 3-4-1](#)(11)(B) by inserting "contained in this title" after "applicable emission limitation or standard." (BM)

*Response:* The definition does not need to be amended because the definition of "applicable emission limitation or standard" already includes similar language.

*Comment:* The proposed definition of "owner or operator" is consistent with the definition provided in [326 IAC 1-2-51](#) and may be important for purposes of liability and responsible party references in Indiana and federal law and regulations. However, the term and definition, as utilized throughout this article are not consistent with common everyday practices. Contractors are utilized and responsible for many functions throughout this article.

As currently presented, contractors could not perform those functions. Further, the current proposal may be contrary to accreditation requirements for certain contractor testing as provided in 40 CFR Part 75. Amend definition to include "lawful designee." (IUG)

*Response:* IDEM is deleting the definition of "owner or operator" in the draft rule for preliminary adoption as it is defined in Article 1 and it is not necessary to have a different meaning in [326 IAC 3](#). IDEM believes responsibility for compliance is on the owner or operator of the source, not person hired to do the monitoring. U.S. EPA has added "contractor" provisions to federal rules, but only on case by case basis.

*Comment:* The definition for "unit operating hour" should include the word "any" instead of "all", to read ". . .while **any** associated emission units are combusting fuel." (IUG)

*Response:* IDEM has amended the definition in draft rule for preliminary adoption as suggested.

*Comment:* Consistent with the definition section and other references throughout the proposed rule, change the word "limit" to "limitation" in [326 IAC 3-4-1](#)(15)(A)(iii) and the change the last phrase of [326 IAC 3-4-1](#)(15)(C)(viii) to "with an emission limitation or standard". (BM)

*Response:* IDEM has amended the definition for "monitoring" in draft rule for preliminary adoption as suggested.

*Comment:* [326 IAC 3-5-1](#) generally sets forth requirements to properly calibrate, test, and report data from COMS and CEMS. It is a collection of existing substantive requirements, but does not appear to establish new substantive requirements, as stated in [326 IAC 3-5-1](#)(a)(1). The rule does not establish a "process for developing suitable continuous monitoring requirements," as stated in [326 IAC 3-5-1](#)(a)(2). The introductory text in unnecessary and [326 IAC 5-5-1](#)(a) should be deleted. (IPL) (BT)

*Response:* IDEM agrees and has deleted subsection (a) in the current [326 IAC 3-5-1](#) and relettered the remaining subsections in the draft rule for preliminary adoption.

*Comment:* [326 IAC 3-5-1](#)(b)(2) through (8) each should include "to the extent to determine compliance with an emission limitation or standard contained in this title." (BM)

*Response:* IDEM added "to determine compliance with an emission limitation or standard" in the lead-in paragraph for this subsection in the draft for preliminary adoption to address this comment. 40 CFR 51, Appendix P, allows states to exempt emissions units not subject to an applicable emission standard of an approved SIP.

*Comment:* Replace "[326 IAC 2-1](#)" with "[326 IAC 2-1.1](#)" in [326 IAC 3-5-1](#)(d). (BM)

*Response:* IDEM agrees and has made the replacement in draft rule for preliminary adoption as suggested.

*Comment:* Delete the word "of" in the second sentence of [326 IAC 3-5-2](#)(5), just prior to "40 CFR 60." (BM)

*Response:* IDEM has deleted "of" in draft rule for preliminary adoption.

*Comment:* The commenter has concerns with the language provided at [326 IAC 3-5-4](#), standard operating procedures. The requirement that the SOP manual include daily operation ((c)(7)(A)) and preventive maintenance and corrective maintenance ((c)(9)) procedures is too broad considering the numerous scenarios that could be included. Instead these procedures should be maintained on site or stored at a central location and made available to the department upon request by the department. This would also eliminate burdensome updates to the SOP manual every time a tweak to a procedure or frequency of an action is made. Also, the requirement ((c)(10) regarding the listing of spare parts should be deleted. U.S. EPA removed this requirement from federal 40 CFR Part 75 rules (May 26, 1999, 64 FR 28564) (IUG)

*Response:* IDEM does not consider this too burdensome since updates are submitted to IDEM within two years of the revisions. Until that time the updated procedures can be maintained onsite. IDEM does look at the spare parts list and wants to know if source is taking too long getting a part or if it is a part the source would not be expected to be kept available. The state rule only requires sources to keep a listing of the manufacturer's recommended spare parts inventory. The changes at the federal level for Part 75 sources removed the requirement to maintain an inventory of spare parts.

*Comment:* How are/will conflicts between quality assurance requirements under a NSPS or NESHAP and [326 IAC 3-5-5](#) be resolved? (BM)

*Comment:* Amend [326 IAC 3-5-5](#)(a) as follows:

Sec. 5. (a) Except where **specific provisions in 40 CFR 60\*, 40 CFR 61\*, 40 CFR 63\* or 40 CFR 75\* are** applicable for affected ~~facilities~~ **sources or emissions units** under the acid rain program, quality assurance requirements specified in this section and 40 CFR 60\*, Appendix F, apply to continuous emission monitors that monitor the following:

The proposed amendment will ensure that where a federal regulatory requirement varies from 40 CFR 60, Appendix F, that requirement will still remain as the applicable QA/QC provisions for the emission unit. (ELC)

*Response:* In general, emissions units would be subject to requirements in both rules. IDEM is proposing in the draft rule for preliminary adoption to delete emissions units subject to 40 CFR 61 and 40 CFR 63 from the applicability provisions in [326 IAC 3-5-1](#) and therefore NESHAP sources would not be subject to [326 IAC 3-5-5](#) eliminating this issue for NESHAP sources, unless the emissions unit was brought into [326 IAC 3-5](#) because of another applicability provision. For NSPS sources, there is more of a consistency between 40 CFR Part 60 and it is less of an issue.

*Comment:* To address different terminology used in [326 IAC 3-5-5](#)(a) and 40 CFR Part 75 the text at [326 IAC](#)



[3-5-5\(a\)](#) should be revised as follows:

"Except for "affected units" under Part 75 that are also "emissions units" subject to this rule, quality assurance requirements specified in this section and 40 CFR 60, Appendix F, apply to continuous emission monitors that monitor the following:"

[326 IAC 3-5-5\(b\)](#) should read as follows:

"Emission units that are also subject to 40 CFR Part 75 shall follow the quality assurance procedures of 40 CFR 75 and report the results in accordance with subsection (f)."

Also, all units subject to Part 75 QA requirements should use Part 75 QA procedures. There is no basis to only extend Part 75 requirements only to "peaking units." (IPL) (BT)

*Response:* IDEM has revised [326 IAC 3-5-5\(a\)](#) and [326 IAC 3-5-5\(b\)](#) as suggested. IDEM added "peaking units" to address the fact that many of the turbines/peaking units went ahead and installed CEMS because IDEM had asked for NO<sub>x</sub> and CO CEMS for PSD purposes. Since "peakers" do not operate all the time this was causing a problem because our rules do not allow for extending the requirement to conduct annual RATAs. Therefore "peakers" were constantly running into conflict with the requirement to do a RATA during times when they were not operating. This was meant specifically for "peakers" and was not intended to address units that are in constant operation.

*Comment:* [326 IAC 3-5-5\(f\)](#) requires certain audits to be conducted with RATAs submitted to the department within 30 days of the end of each quarter. Common practice has been to submit the report within 45 days after the completion of the test, which is also IDEM's preference. Clarity on the timing for filing these reports needs to be provided. (IUG)

*Response:* Yes, 45 days has been common practice and IDEM prefers this time frame for RATAs as this is the time frame for submitting performance test data.

*Comment:* How are/will conflicts between the averaging periods required in [326 IAC 3-5-7\(b\)\(3\)](#) and those contained in individual NSPS or NESHAP be resolved? (BM)

*Comment:* The reporting requirements found in [326 IAC 3-5-7](#) provide a clear example of where the Indiana rules create confusion and potential conflict with federal regulatory requirements. [326 IAC 3-5-7\(b\)\(3\)](#) specifies that gaseous excess emissions data reports shall be reported using three hour block periods ending at 03:00 and every three hour block thereafter. This subsection ends with the phrase regarding data reports for sources or emissions units subject to hourly, daily or other averaging time periods, a phrase which doesn't very clearly state what information is required. This language is very confusing, and could be read to require a source to report emissions data in both 3-hour blocks and another applicable reporting period, such as a 24-hour block, because of the nature of the applicable emission limit. If a source operated a total hydrocarbon (THC) CEMS because of MACT standard that was a 24-hour limit, there is no reason the source should have to report the data in 3-hour blocks. Because the last sentence in the subsection is limited only to 1-hour, daily/24-hour, and 30-day averaging periods, it also provides no guidance in the circumstances where a standard may expressed in a different averaging period. In addition, this language is inconsistent with similar language in what is proposed to be [326 IAC 3-5-7\(c\)\(3\)](#). The confusion and potential conflict in this provision could be resolved by deleting [326 IAC 3-5-7\(b\)\(3\)](#) in its entirety. The language in what is proposed to be [326 IAC 3-5-7\(c\)](#) adequately describes the requirements. (ELC)

*Comment:* The current language at [326 IAC 3-5-7\(b\)\(3\)](#) appears to require the reporting of 3 hour block averages regardless of the averaging time of the applicable emissions limitation. The language should be clarified to require that sources report the gaseous emissions data which is consistent with the applicable standard as follows:

"(3) Gaseous excess emissions data reports shall include the emissions data for each averaging period in the reporting period. The averaging period shall be consistent with the applicable emissions limitation. Gaseous excess emissions data shall be reported with the quarterly report required in this section." (IUG)

*Response:* In general, emissions units would be subject to requirements in both rules. IDEM has amended [326 IAC 3-5-7\(b\)\(3\)](#) in the draft rule for preliminary adoption to say that the three hour block average does not apply if the owner or operator must demonstrate compliance with a different averaging period as specified by an applicable rule or permit condition. IDEM is also proposing that emissions units that were only subject to [326 IAC 3-5](#) because of NESHAP applicability will no longer be subject to [326 IAC 3-5](#) thus removing the requirement for quarterly reports for excess emissions under [326 IAC 3-5-7](#) allowing for NESHAP emission units to follow the schedule in the applicable NESHAP and Title V. IDEM plans to submit this rulemaking to U.S. EPA for SIP approval and will continue to discuss this rulemaking with U.S. EPA as it is reviewed for federal approval.

*Comment:* Amend the reporting requirements at [326 IAC 3-5-7\(c\)\(4\)](#) to indicate that daily zero and span calibration checks should be kept on site as indicated in the record keeping requirements of [326 IAC 3-5-6](#). (IUG)

*Response:* IDEM deleted the phrase "which shall be reported separately" at [326 IAC 3-5-7\(c\)\(4\)](#) in the proposed rule for preliminary adoption to address the conflicting language.

*Comment:* The record keeping requirements of [326 IAC 3-5-7\(d\)\(2\)](#) are duplicative of [326 IAC 3-5-6\(a\)\(6\)](#). Delete [326 IAC 3-5-7\(d\)\(2\)](#) and merge the remainder of this rule into one paragraph under [326 IAC 3-5-7\(d\)](#). (BM)

*Response:* IDEM agrees and has deleted [326 IAC 3-5-7\(d\)\(2\)](#) in the draft rule for preliminary adoption as

suggested.

*Comment:* The plain language of [326 IAC 3-5-8\(c\)](#) requires that the CEMS and COMS be in continuous operation regardless of operational status of the equipment being monitored. IDEM should amend [326 IAC 3-5-8\(c\)](#) to the following:

"(c) CEMS and COMS shall be in continuous operation during periods of emission unit operation except for CEM/COM malfunctions, repairs, calibration checks, and zero and span adjustments and other required QA/QC activities." (BM)

*Comment:* Add ". . . during operation of the emissions unit(s) being monitored unless provided otherwise in the source or emission unit's operating permit" to the end of [326 IAC 3-5-8\(c\)](#) to address times when the unit is not monitoring or during planned outages. (IUG)

*Comment:* The commenter appreciates IDEM's efforts to clarify that monitoring system malfunctions, repairs, and other QA/QC activities should be recognized as valid events that do not require operation of the CEMS or COMS. The following revisions are offered to the language to clarify its purpose and intent, and to eliminate redundancy or unintentional conflict:

**"326 IAC 3-5-8 Operation and Maintenance** of continuous emission monitoring and continuous opacity monitoring systems

Sec. 8. (a) This section applies to the **operation and maintenance** of CEMS and COMS.

(b) The owner or operator of a CEMS or COMS **required by federal or state regulations or permit** shall:

- (1) install;
- (2) calibrate;
- (3) maintain;
- (4) operate; and
- (5) certify;

~~all necessary~~ **such** CEMS or COMS and related equipment in accordance with applicable federal regulations, this rule, and any applicable permits.

(c) Except for **periods when:**

- (1) the affected source or emissions unit is not operating;**
- (2) the affected source or emissions unit is operating under a scenario that does not require CEMS or COMS;**
- (3) the affected source or emissions unit is operating in a scenario where there are no emissions of the pollutant for which the CEMS or COMS measures;**
- (4) the CEMS or COMS is experiencing a malfunction;**
- (5) the owner/operator is repairing the CEMS or COMS; or**
- (6) the owner/operator is conducting CEMS or COMS quality assurance and quality control activities, including, but not limited to:**
  - (A) calibration checks;**
  - (B) zero and span adjustments;**
  - (C) calibration gas audits; or**
  - (D) other required quality assurance/quality control activities;**

~~system breakdowns, repairs, calibration checks, and zero and span adjustments,~~ all CEMS and COMS shall be in continuous operation." (ELC)

*Response:* IDEM has amended the draft language for preliminary adoption to reflect revisions as suggested by ELC, except for inclusion of subdivisions (2) and (5). IDEM did not include the suggested subdivisions (2) because there are too many possible scenarios with all the regulated sources to consider an across the board exemption, and (5) is covered under the malfunction provisions. This revision includes the revision suggested by the other commenter to limit CEMS/COMS operation to periods of emissions unit operation.

*Comment:* [326 IAC 3-5-8\(e\)\(2\)](#) states that the source has to submit reports in accordance with Section 7(d). Section 7(d) only covers reports where there are no excess emissions or monitoring downtime during the reporting period. Amend citation to "section 7." (IUG)

*Comment:* Since section 7(d) only talks about reports where there are no excess emissions or monitoring downtime [326 IAC 3-5-8\(e\)\(2\)](#) should be changed to cite "section 7." (IPL) (BT)

*Response:* IDEM has removed the reference to subsection (d) as suggested.

*Comment:* [326 IAC 3-6-2](#) should require IDEM to issue a written approval of a stack test protocol at some point prior to conducting the stack test. (ELC)

*Comment:* There are no time limits on IDEM to indicate its approval or disapproval of the test protocol form in [326 IAC 3-6-2\(a\)](#). Similarly, [326 IAC 3-6-2\(h\)](#) provides a new requirement that rescheduled test dates must be approved by the department if notification is provided to IDEM less than 14 days prior to the rescheduled test date. This may be an appropriate area to address with a non-rule policy document (NPD). The commenter requests that this topic be taken up in a workgroup setting with all interested parties given an opportunity to agree upon a suitable protocol. (IUG)

*Response:* At this time IDEM does not have the resources to formally send approval letters to companies.

Additionally, protocol approval is often dependent upon a source providing additional information to IDEM and this often means the reviewer and the source are continuing to discuss the acceptability of the protocol within days of the scheduled test. IDEM continues to approve protocols and works with sources as necessary to ensure any issues with the protocol are communicated within an acceptable time frame. Sources are always free to contact IDEM to discuss the status of any given protocol. IDEM is not proposing to amend the rule as suggested.

*Comment:* Use of the term "minor change" in [326 IAC 3-6-2\(d\)](#) is vague. (BM)

*Response:* A minor change is simply a change that is generally acceptable and does not involve a change which would require a resubmittal and subsequent review of an already approved protocol. An example of a minor change would be using Method 17 instead of Method 5, or using an instrumental method to measure oxygen and carbon dioxide instead of taking a sample for Orsat Analysis.

*Comment:* Proposed changes at [326 IAC 3-6-3\(b\)\(2\)](#) which requires emissions test runs to be conducted within 24 hours unless otherwise impracticable or approved by the commissioner. This is not a realistic requirement for relative accuracy test audits (RATAs) and other non-RATA tests may extend beyond 24 hours also. IDEM should delete this proposed revision to the rule. (IUG)

*Comment:* [326 IAC 3-6-3\(b\)\(2\)](#) which requires all test runs for a given pollutant be conducted within 24 hours is more stringent than federal requirements. What is the need for this requirement? Would approvals for more time be considered a variance from the rule requiring public notice? Could IDEM approvals be done in a timely manner? IDEM should adopt an approach similar to U.S. EPA where stack testing approaches are issued as guidance and not a rule to adopt approaches on a case by case basis. (BM)

*Response:* The purpose of this is to ensure sources conclude testing within a reasonable time frame. IDEM understands that circumstances may necessitate a longer time frame therefore the provision does allow for approval of a longer test time. The reason this has been proposed is that IDEM does not want sources conducting a test run, stopping a test and then cancelling the remaining runs after receiving information that the first run appears non-compliant. Sources are free to conduct preliminary test runs at their discretion; however, when the formally scheduled test is to take place, all test runs should be conducted within reasonable timeframes. In order to accommodate more situations up front in the rule, IDEM is proposing in the draft rule for preliminary adoption to change the time frame from 24 hours to 48 hours.

*Comment:* A source should be required to include in the report a summary of the stack test results in comparison to the applicable emission limit that was tested against. This would ensure that the source is aware of the test results as it relates to the emission limit instead of putting the source in the position of asserting, under certification of truth and accuracy, compliance or non-compliance with an emission limit. Many sources view the determination of compliance or non-compliance as a function of IDEM or a court, and fear the risk of further liability if the agency were to determine that a source certified compliance but there was an error in the report that revealed non-compliance. Language proposed in [326 IAC 3-6-4\(a\)\(2\)\(A\)](#) should be deleted. In its place, a new item (F) should be added to [326 IAC 3-6-4\(a\)\(3\)](#) that reads as follows:

"(F) A stack test result summary table that compares the measured emissions in units consistent with the applicable emissions limitations to the emissions limitations." (ELC)

*Comment:* Amend [326 IAC 3-6-4\(a\)\(2\)](#) to require that the source provide a comparison of the emission unit's limit(s) and the result(s) of the stack test(s). As it is currently drafted it appears to ask for the compliance status of every requirement associated with the unit or units tested which would be duplicative of other reporting requirements rather than the results of the stack test. (BM)

*Comment:* Delete the proposed changes at [326 IAC 3-6-4\(a\)\(2\)\(A\)](#) that requires reporting of a "complete listing of all applicable compliance limits." This information is available in the applicable operating permit for a particular emissions unit or source. (IUG)

*Response:* IDEM believes it is helpful to both sources, and IDEM to include the applicable limitations and the compliance status in the test report. In the past there have been cases where the source has failed to mention they are non-compliant and has simply sat back and waited for IDEM to act. In these cases the sources have exceeded their 120 day requirement for retesting, and due to the prioritization at IDEM of non-compliant test reports, these reports were not reviewed for many months as IDEM staff believed them to be compliant. IDEM believes that this not an overly burdensome provision as IDEM assumes sources to already be well aware of the applicable compliance limits in their permits. Restating this information in the test report should require only minimal effort on the source's part. IDEM is proposing to amend the draft rule for preliminary adoption to require "a stack test result summary table that compares the measured emissions in units consistent with the applicable emissions limitations to the emissions limitations." This would ensure that the source is aware of the test results as it relates to the emission limit and clarify that it is a comparison to applicable emissions limitations and not every requirement associated with the unit.

*Comment:* [326 IAC 3-6-4\(b\)](#) requires sources to submit test reports no later than 45 days after completion of the test with an option to request extended time. There is no means provided for sources to know if an extension was granted. This is an issue that could be settled through workgroup discussion. (IUG)

*Response:* IDEM responds to all extension requests upon receipt. This has been done formally through certified mail, however it is often done via e-mail to expedite the process. Again, sources are always welcome to

inquire about the status of any extension request at any given time.

*Comment:* IDEM should revise [326 IAC 3-6-5\(a\)\(2\)](#) to allow sources to use OTM-28 to measure particulate matter (PM) emissions until U.S. EPA publishes a new or revised condensable PM test method. U.S. EPA is spending a considerable amount of time and money in the development of a test method that will accurately measure condensable PM. IDEM has already acknowledged that U.S. EPA plans to either amend or replace Method 202 for measurement of PM<sub>2.5</sub> by including language in the commenter's air permit requiring testing once U.S. EPA publishes a revised or new test method. (Alcoa)

*Comment:* Add a provision at [326 IAC 3-6-5\(a\)\(2\)](#) to allow the use of "other procedures approved by the department" in measuring PM<sub>10</sub>. This would allow a source to request the use of the conditional test method for PM<sub>10</sub> that is designed to eliminate artifacts associated with Method 202. (IUG)

*Response:* IDEM has revised [326 IAC 3-6-5\(a\)\(2\)](#) to allow "other methods as approved by the department and U.S. EPA."

*Comment:* The proposed changes to [326 IAC 3-6-5\(a\)\(3\)](#) would require visible emissions (VE) evaluation testing during stack tests for PM and PM<sub>10</sub> as well as for "other mass emission rate testing, as required by the department." Waivers would have to be obtained from the department rather than the on-site department staff as currently required. Allow on-site department staff to issue adverse weather condition waivers. Why are VE evaluations required? The VE notations may be a surrogate for particulate, but stack test results for particulate are more accurate than the VE notations or opacity. What is "other mass emission rate testing"? It is not clear that VE or opacity would be an appropriate surrogate for "other mass emission rate testing." What would be the basis the department requiring VE testing? Stacks equipped with wet scrubbers should be exempt from the requirement to conduct VE evaluation during testing. VE evaluations should be eliminated during stack tests, or at least the requirement for VE notations during mass emission rate testing should be deleted. (IPL) (BT) (IUG)

*Comment:* The proposed amendment at [326 IAC 3-6-5\(a\)\(3\)](#) for testing of PM or less than PM<sub>10</sub> emissions requiring visible emissions (VE) evaluations in conjunction with PM, PM<sub>10</sub>, or other mass emission rate testing of air pollutants could be interpreted to require Method 9 opacity readings when gaseous pollutants or PM pollutants are measured. Also, the proposed amendment does not provide relief for emission units that installed a PM continuous emissions monitor (PM CEMS), because the final control device is a wet scrubber. U.S. EPA is considering, but has not finalized regulatory relief from compliance with an opacity standard if the emissions unit is equipped with a PM CEMS. The commenter suggests that IDEM add PM<sub>2.5</sub> to the list of pollutants tested and remove "other mass emission rate" from [326 IAC 3-6-5\(a\)\(3\)](#) and allow waivers from VE readings if the unit is equipped with a PM CEMS. (Alcoa)

*Response:* VE evaluations have always been required during PM/PM<sub>10</sub> tests; this is not a new requirement. By correlating the visible emission level during PM/PM<sub>10</sub> tests to the emission rate it provides inspectors an valuable tool for assessing whether the unit and associated control (if any) are running in the proper manner during inspections that may take places several years after the test. For instance, if during a compliance test the source was within their compliance limit with no visible emissions present, then during an inspection two years later visible emissions as read by the department were 15%, it may provide grounds for conducting another test to ensure the source was still compliant, or at the very least identifying why the visible emissions had changed between the two events. There are requirements to conduct visible emissions evaluations during stack tests for pollutants other than particulate. Lead testing pursuant to 40 CFR 60 is one example. Another example would occur when the testing was for a pollutant that existed in the solid phase such as metal HAPs. While the testing may not be specifically for particulate, the fact that the HAPs are by nature "particles" would make concurrent VE evaluations valuable for the reason already stated above. IDEM has revised the draft rule for preliminary adoption to allow the department or staff member present on-site to grant waivers for VE readings during adverse conditions. IDEM does not consider it appropriate to exempt stacks equipped with wet scrubbers from the requirement to conduct VE evaluation during testing or to remove the requirement for VE notations during mass emission rate testing. IDEM agrees that VE readings are not necessary for units equipped with a PM CEMS and has added this exemption to the draft rule for preliminary adoption. IDEM has added PM<sub>2.5</sub> to the list of pollutants tested.

*Comment:* [326 IAC 3-6-5\(a\)\(3\)](#) includes the phrase "unless otherwise mandated by federal regulation" How would a federal regulation affect the requirement to conduct visible emissions for at least 30 minutes? (BM) (Alcoa)

*Response:* While the state rule only requires opacity to be read for thirty minutes for every hour of particulate sampling, U.S. EPA requires hour for hour reading. For example, while IDEM would only require three, 30 minute opacity runs at an asphalt plant for state implementation (SIP) compliance, the federal requirement under 40 CFR 60, Subpart I, would mandate three, 60 minute opacity runs. Therefore the federal rule is more stringent and the source would need to perform 180 total minutes of VE reading.

*Comment:* The language in [326 IAC 3-6-3\(b\)\(1\)\(B\)](#) conflicts with [326 IAC 3-6-3\(b\)\(1\)\(A\)](#) (or at the very least, is duplicative) and should be deleted. Clause (A) requires sources to conduct stack testing when it is operating at a minimum of 95% of its maximum operating capacity. In clause (B), the source must conduct a stack test under conditions of "worst case emissions." These terms conflict to the extent that clause (B) requires operating at a



100% capacity irrespective of what clause (A) allows. In addition, clause (C) expands the existing requirements to allow the department to impose testing conditions where "the department believes that changes in operating capacities have the potential to affect the emission levels." There is no obvious basis for this new condition or limit to the types of "operating capacities" under which IDEM can require tests. Emission limits at sources were established using specific testing protocols and these test protocols must be used during emission testing to demonstrate compliance with the existing limits. Clause (C) should be revised to delete "including, but not limited to, process conditions when the department believes that changes in operating capacities have the potential to affect the emission levels." (IPL) (BT)

*Comment:* The proposed amendments to [326 IAC 3-6-3](#) have changed acceptable performance test conditions from testing at conditions representing "normal operations" to conditions that represent at a minimum of 95% of the unit's listed maximum process or operating rate included in its permit and under conditions of worst case emissions. This differs from federal guidance contained in U.S. EPA's Clean Air Act National Stack Testing Guidance document dated April 27, 2009, which reads in part:

Page 16 – A facility is not required automatically to retest if the initial test does not represent the range of combined process and control measure conditions under which the facility expects to operate, or if the test does not challenge to the fullest extent possible the facility's ability to meet applicable emissions standards without creating an unsafe condition. Furthermore, the facility is not required automatically to retest if the facility's operating conditions subsequently vary from those in place during the performance test. The delegated agency must determine whether retesting is warranted. . .

Additionally, the proposed amendments would require facilities to rely on a unit's "descriptive operating capacity" for determination of test validity. This descriptive information is not enforceable. Also, the term "worst case emissions" is overly broad. IDEM should restore the validity of emissions testing performed at conditions representative of normal operating conditions. (BM)

*Response:* The requirement to test at or near maximum capacity has not changed. IDEM feels it is necessary to clarify that emissions units should test under conditions of maximum operation, or under conditions which would simulate "worst case" emissions for the pollutant or pollutants being tested. IDEM feels this is the more appropriate way to ensure that sources are compliant at other operating conditions which may involve running at maximum capacity, or under "worst case" conditions. In general, if these requirements are met a question cannot be raised regarding the compliance status under other operating scenarios. Regardless, IDEM also allows other operating conditions to be approved under clauses (B) or (C) in full realization that many sources will need to work with IDEM to develop an agreeable operating scenario for testing. This approach is consistent with other states within region V who require testing at or near maximum capacity. Additionally, U.S. EPA's Clean Air Act National Stack Testing Guidance (on page 15) discusses U.S. EPA's belief that challenging the control device under conditions simulating maximum loading is appropriate for sources with a mass emission limit. Normal operating conditions is overly broad and has often been interpreted to mean an emissions unit can operate at whatever condition it happens to be running at during the scheduled test. It may also create a situation where a company is operating at a much higher capacity than the capacity achieved during the most recent test. This could lead to a situation where a company may be required to retest if a reasonable suspicion exists that the higher operating rate may place the company's compliance status in jeopardy. The intent of the rule language is to clearly communicate that companies should strive for testing at maximum production rates, or a rate that creates a "worst case" condition, or at another production capacity as agreed upon during protocol review. Under these circumstances both IDEM and the source has assurances the source is operating in compliance across the range of expected operating conditions and would remove the possibility of retesting being conducted due to future production increases. IDEM realizes that the descriptive sections of the permit do not constitute enforceable conditions. However, when determining whether the requirements of [326 IAC 3-6-3\(b\)](#) are being met during testing, IDEM uses the descriptive capacities which were provided by the source as part of the permit application. Without a definitive statement somewhere in the permit of what the maximum operating capacity of a particular unit is, IDEM has no way of ensuring the operating capacity requirement has been met. IDEM disagrees that the term "worst case emissions" is overly broad. Worst case emissions is just that, the operating condition that produces the highest potential emission rate for the pollutant or pollutants that are part of the test program. [326 IAC 3-6-3\(b\)\(1\)\(B\)](#) deals with sources where running at maximum capacity may not simulate worst case conditions. An example is printing presses where in many cases the speed of the line does not correspond to maximum VOC loading. In these cases "worst case" is often a slower line speed with a more complete surface covering. This condition is designed to address these special cases and does not force sources to run at 100% production rates. IDEM has revised the draft rule for preliminary adoption to make it clear that it is clause (A) or (B), not clause (A) and (B). IDEM feels it is useful to retain the "including, but not limited to, process conditions when the department believes that changes in operating capacities have the potential to affect the emission levels" language in clause (C).

*Comment:* [326 IAC 3-6-6](#) provides a regulatory framework to judge the validity of an emissions test. IDEM has not provided sufficient detail in its criteria to invalidate performance results. Why is the proposed rule necessary? (BM)

*Comment:* Delete proposed new section [326 IAC 3-6-6](#) because the language in it is far too broad and it provides unfettered discretion to the agency to invalidate a stack test. If the language in this section is tightened up such that the only basis for invalidating a stack test were nonconformance to the stack test protocol, nonconformance with IDEM's written approval of the stack test protocol, or nonconformance with clearly specified regulatory requirements applicable to the test, then the language in the section would more accurately describe when IDEM has authority to invalidate a stack test. As written, it appears this language would allow IDEM to invalidate a stack test if the source or its stack testing contractor failed to follow a verbal instruction or suggestion from IDEM at the time of the stack test. Given the expense of conducting stack tests, sources should not have their stack tests at risk without understanding what the requirements of the test are in writing, through the protocol, protocol approval, or regulations. (ELC)

*Response:* [326 IAC 3-6-6](#) spells out the most common situations that may result in invalidation of a test. We have always had the authority to invalidate a stack test. This does not change or increase IDEM's ability to reject tests, it simply, and clearly gives the most common examples of what sources need to satisfy in order to ensure their tests are acceptable. An example of when IDEM would reject a test that was deemed conditionally acceptable but did not meet the testing requirements would be when calibration data on the stack testers equipment that is not available for review on-site, or calibrations that are performed by staff that indicate a piece of equipment must be recalibrated upon returning from the field. The test may be deemed conditionally acceptable pending a successful calibration outcome. Another example would be when the results of production data could not be verified during testing by the observer. IDEM may invalidate a test upon later discovery that the process or control device was not operated in such a manner as was agreed upon during the test protocol. IDEM may invalidate a stack test based upon verbal communication between an observer and the company at the time of the test. If the observer informs the source during testing that something is conditionally acceptable but will need to be addressed prior to report submittal and subsequently is not, it may result in test rejection. In order to address the concerns expressed by commenters in regards to the broad language in clause (B) requiring the owner or operator to "meet any conditions required by the department. . . that don't meet the testing requirements" IDEM has deleted clause (B) from the draft rule for preliminary adoption. The remaining language in [326 IAC 3-6-6](#) is sufficient to judge the validity of an emissions test.

*Comment:* At [326 IAC 3-6-6\(3\)](#), the term "fugitive emissions" could be interpreted to be quite broad given the manner in which it is used in the proposed new section. IDEM should better identify fugitive emissions of concern to IDEM and cause the invalidation of testing. (IUG)

*Response:* IDEM has added "or associated capture or control system" to [326 IAC 3-6-6\(3\)](#) to address fugitive emissions from capture and control systems.

*Comment:* [326 IAC 3-7-5](#) should be revised to state that sources do not need to have a coal sampling analysis SOP if the source uses CEMs for compliance and does not use coal sampling as a backup when the CEM is down. (IPL) (BT) (IUG)

*Response:* IDEM agrees and has added a new subsection (b) to the draft rule for preliminary adoption.

*Comment:* Amend [326 IAC 3-7-5\(a\)\(6\)](#) to allow revisions to the SOP to be stored at a central location and made readily available for inspection upon notice by the department. (IUG)

*Response:* Consistent with the language in subsection (c) for maintaining record for the rest of [326 IAC 3-7-5](#) IDEM has revised the language in subsection (a)(6) in the draft rule for preliminary adoption to say that SOP revisions shall be "maintained by the source and made available upon request by the department" and not "kept at the site" as initially proposed.

*Comment:* In [326 IAC 7-2-1\(e\)\(2\)](#), the phrase "the other requirements of this rule shall not apply" should be inserted at the end of the sentence. (IPL) (BT)

*Response:* The lead-in line for this subsection (e) (subsection (f) in the draft rule for preliminary adoption) does not require that all methods be used to determine compliance. IDEM has revised the former subsection (g) (subsection (e) in the draft rule for preliminary adoption) to specify that fuel sampling and analysis requirements do not apply when the emissions unit is monitoring using CEMS. Subsection (g) was proposed to be deleted because of the way it was previously written implying that if the owner or operator did not notify the department of CEMS use then the CEMS data could not be used as a means for compliance.

*Comment:* [326 IAC 7-2-1\(e\)](#) states "compliance determination based on a stack test is not sufficient to demonstrate compliance on a continuous basis." To be more accurate, this should be revised to state "compliance determination based on a stack test is not sufficient to demonstrate compliance or non-compliance on a continuous basis. Compliance determination based on a stack test is also insufficient to demonstrate compliance or non-compliance with emission limits based on averaging period which exceed the stack test, such as 30-day rolling averages." (IPL) (BT)

*Comment:* What is the purpose in stating in [326 IAC 7-2-1\(e\)](#) that "stack testing is not sufficient to demonstrate compliance on a continuous basis"? Certain units may not warrant parametric monitoring requirements given their potential to emit or history of compliance. This proposed addition is problematic and affects several other requirements. (BM)

*Response:* IDEM inadvertently included the phrase "compliance determination based on a stack test is not

sufficient to demonstrate compliance on a continuous basis" and has deleted it from the draft rule for preliminary adoption.

## SUMMARY/RESPONSE TO COMMENTS RECEIVED AT THE FIRST PUBLIC HEARING

On December 1, 2010, the Air Pollution Control Board (board) conducted the first public hearing/board meeting concerning the development of amendments to [326 IAC 3](#) and [326 IAC 7-2-1](#). Comments were made by the following parties:

Ann McIver (representing Indiana Energy Association) (IEA)

Following is a summary of the comments received and IDEM's responses thereto:

*Comment:* The term "peaking unit" proposed at [326 IAC 3-4-1](#)(13) needs further evaluation. The commenter would like to discuss the impact of this provision with IDEM. (IEA)

*Comment:* The new provisions for data requirements at [326 IAC 3-5-8](#) and test invalidation criteria at [326 IAC 3-6-6](#) are not clear. The commenter would appreciate the opportunity to participate in workshops prior to final adoption. (IEA)

*Response:* IDEM will schedule an information meeting with interested parties before presenting the rule to the APCB for final adoption.

*Comment:* The standard operating procedures (SOP) at [326 IAC 3-5-4](#)(c) should be clarified to provide that the SOP manual does not need to be updated between the submittal of revisions, if a record of the change to the procedures is kept in a central location rather than on-site, which is sometimes impractical, and made available for inspection by the department upon request. (IEA)

*Response:* IDEM agrees that the SOP can be kept at only a central office as long as it is readily available to the CEMS operators and IDEM inspectors, when necessary. If a SOP is kept on-site and at a central location, they should contain the same information and any changes should be reflected in both copies. IDEM will continue to discuss this issue with affected parties.

*Comment:* There is confusion related to the timing of submittal of certain reports related to relative accuracy test audits (RATA) at [326 IAC 3-5-5](#)(f). The Indiana Utility Group had submitted comments during the Second Notice of Comment Period that it was common practice to submit RATA reports within 45 days after completion of the tests. It appears that IDEM agreed with these comments, but the provision requiring submittal within 30 days after the end of the quarter remains in the proposed rule. (IEA)

*Response:* IDEM did not amend the rule language because while it is common practice to submit certain reports within 45 days after the completion of the test, such as a RATA report for a CEMS (which is a field test that is often observed by IDEM), the rule requires all quality assurance reports under [326 IAC 3-5-5](#)(f) to be submitted within 30 days after the end of the quarter. Unless the test is completed less than 15 days before the end of a quarter submitting reports within 45 days after the completion of the test would be a more stringent requirement. Other quality assurance activities, such as cylinder gas audits, are also in this section, and these types of reports are submitted within 30 days after the end of the quarter. IDEM will continue to discuss this issue with affected parties.

*Comment:* In the response to comments IDEM agreed that emission test runs should be extended from 24 hours to 48 hours, however, this change is not noted at [326 IAC 3-6-3](#)(b)(2). (IEA)

*Response:* IDEM will make the change to 48 hours in the rule presented for final adoption.

[326 IAC 3-4-1](#); [326 IAC 3-4-2](#); [326 IAC 3-4-3](#); [326 IAC 3-5-1](#); [326 IAC 3-5-2](#); [326 IAC 3-5-3](#); [326 IAC 3-5-4](#); [326 IAC 3-5-5](#); [326 IAC 3-5-6](#); [326 IAC 3-5-7](#); [326 IAC 3-5-8](#); [326 IAC 3-6-1](#); [326 IAC 3-6-2](#); [326 IAC 3-6-3](#); [326 IAC 3-6-4](#); [326 IAC 3-6-5](#); [326 IAC 3-6-6](#); [326 IAC 3-7-1](#); [326 IAC 3-7-2](#); [326 IAC 3-7-3](#); [326 IAC 3-7-4](#); [326 IAC 3-7-5](#); [326 IAC 7-2-1](#)

SECTION 1. [326 IAC 3-4-1](#) IS AMENDED TO READ AS FOLLOWS:

### [326 IAC 3-4-1](#) Definitions

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-11](#); [IC 13-15](#); [IC 13-17](#)

Sec. 1. In addition to the definitions provided in [IC 13-11](#), [326 IAC 1-2](#), and [326 IAC 2-7](#), the following definitions apply throughout this article unless expressly stated otherwise:

(1) "Applicable emission limitation or standard" means any of the following:

(A) A state or federal emission limitation or standard applicable to a regulated hazardous air pollutant under 40 CFR 61\* or 40 CFR 63\*.

(B) A state or federal emission limitation or standard applicable to a regulated air pollutant, other than a hazardous air pollutant under Section 112 of the CAA, for which the source is classified as a major source.

~~(2)~~ **(1)** "Calendar quarter" means a **consecutive** three (3) month period (**nonoverlapping**) beginning on:

- (A)** January 1;
- (B)** April 1;
- (C)** July 1; or
- (D)** October 1.

~~(3)~~ "Certified emissions monitor" means an emissions monitor that meets all applicable performance specifications of 40 CFR 60\* or any other performance specification, and for which performance data has been submitted to and approved by the department.

**(2)** "Capture system" means the equipment, including hoods, ducts, fans, and booths, that is used to contain, capture, and transport a pollutant to a control device.

**(3)** "Continuous emission monitoring system" or "CEMS" means the equipment required by the applicable permit, state rule, or federal regulation used to sample, analyze, measure, and provide a continuous, permanent record of emissions in units of the applicable standard or other form.

**(4)** "Continuous opacity monitoring system" or "COMS" means the equipment required by the applicable permit, state rule, or federal regulation used to measure the opacity of the effluent on a continuous basis as either of the following:

- (A)** The optical density of the effluent gas.
- (B)** The opacity of the effluent gas.

**(5)** "Data" means the results of any type of monitoring or method, including the results of:

- (A)** instrumental or noninstrumental monitoring;
- (B)** emission calculations;
- (C)** manual sampling procedures;
- (D)** record keeping procedures; or
- (E)** any other form of information collection procedure used in connection with any type of monitoring or method.

**(6)** "Emission limitation or standard" means the following:

**(A)** Any applicable requirement under the CAA that constitutes:

- (i)** an emission limitation or standard;
- (ii)** a standard of performance; or
- (iii)** a means of emission limitation.

**(B)** An emission limitation or standard may be expressed:

- (i)** in terms of the pollutant, either as:
    - (AA)** a specific quantity, rate, or concentration of emissions; or
    - (BB)** the relationship of uncontrolled to controlled emissions; or
  - (ii)** as either:
    - (AA)** a work practice;
    - (BB)** a process or control devices parameter; or
    - (CC)** another form of specific:
      - (aa)** design;
      - (bb)** equipment;
      - (cc)** operational; or
      - (dd)** operation and maintenance;
- requirement.

**(C)** For purposes of [326 IAC 3-8](#), an emission limitation or standard shall not include general operation requirements that an owner or operator may be required to meet.

~~(4)~~ **(7)** "Emission test", ~~"source sampling test"~~, "compliance test", or "performance test" means a procedure for sampling a gas stream from a single sampling location at a facility, **an emissions unit**, or pollution control equipment, to determine a pollutant emission rate, concentration, or parameter while the facility, **emissions unit**, or pollution control equipment is operating at conditions that result in measurement of the highest emission or parameter values (prior to any control device), or at other operating conditions approved by the department or U.S. EPA. A test shall comprise three (3) sampling runs for a specified sampling time span. Additional conditions may be required by applicable rules, permit, or enforcement order. The test **owner or operator** shall be performed **perform the test** using sampling and analytical procedures approved by the department or U.S. EPA for the specific pollutant or parameter and facility, **emissions unit**, pollution control equipment, process, or operation.

~~(5)~~ **(8)** "Emissions unit" means any part of or activity at a source that emits or has the potential to emit any regulated air pollutant for which an emission limitation or standard has been established. This term does not alter or affect the definition of the term "unit" for purposes of Title IV of the CAA or of the term "emissions unit" for purposes of Title V of the CAA. **has the meaning set forth in [326 IAC 1-2-23.5](#).**

**(9)** "Exceedance" means a condition that:

- (A)** is detected by monitoring that provides data in terms of an emission limitation or standard; and



- (B) indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.
- (10) "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. For purposes of this article, a CEMS or COMS is considered process equipment.
- ~~(6) "Major source" means any major source as defined in [326 IAC 2-7-1](#)(22), excluding any source described in [326 IAC 2-7-1](#)(22)(A).~~
- ~~(7)~~ (11) "Monitoring" means any form of collecting data on a routine basis to determine or otherwise assess compliance with emission limitations or standards. **The term includes the following:**
- (A) Record keeping, if records are used to determine or assess compliance with an emission limitation or standard, including:
- (i) records of raw material content and usage;
  - (ii) records that document compliance with work practice requirements; or
  - (iii) other records used to determine or assess compliance with an emission limitation or standard.
- (B) Compliance method tests that are conducted on a routine periodic basis.
- (C) One (1) or more of the following data collection techniques, where appropriate, for a particular circumstance:
- (i) Continuous emission or opacity monitoring systems.
  - (ii) Continuous process, capture system, control device, or other relevant parameter monitoring systems or procedures, including a PEMS.
  - (iii) Emission estimation and calculation procedures.
  - (iv) Maintenance and analysis of records of fuel or raw materials usage.
  - (v) Recording results of a program or protocol to conduct specific operation and maintenance procedures.
  - (vi) Verification of emissions, process parameters, capture system parameters, or control device parameters, using portable or in situ measurement devices.
  - (vii) Visible emission observations.
  - (viii) Any other form of measuring, recording, or verifying on a routine basis emissions, process parameters, capture system parameters, control device parameters, or other factors relevant to assessing compliance with an emission limitation or standard.
- ~~(8) "Monitor system malfunction" means any interruption in the collection of valid data as a result of the failure of any component of the system to operate within the specifications of the applicable performance specification.~~
- ~~(9)~~ (12) "Out of control" means any data collected by a continuous monitoring system during periods immediately following an out of tolerance quality assurance assessment and prior to an acceptable quality assurance assessment.
- ~~(10) "Permit" means any applicable permit issued, renewed, amended, revised, or modified under [326 IAC 2-1](#), [326 IAC 2-2](#), [326 IAC 2-3](#), [326 IAC 2-7](#), [326 IAC 2-8](#), or [326 IAC 2-9](#).~~
- (13) "Peaking unit" means the following:
- (A) An emissions unit that has:
- (i) an average capacity factor of not more than ten and zero-tenths percent (10.0%) during the previous three (3) calendar years; and
  - (ii) a capacity factor of not more than twenty and zero-tenths percent (20.0%) in each of those calendar years.
- (B) For purposes of 40 CFR 75\*, an emissions unit may initially qualify as a peaking unit if the designated representative demonstrates to the satisfaction of the commissioner that the requirements of clause (A) are met, or will in the future be met, through one (1) of the following submissions:
- (i) For a unit for which a monitoring plan has not been submitted under 40 CFR 75.62\*, the designated representative submits either:
    - (AA) capacity factor data for the emissions unit for the three (3) calendar years immediately preceding the date of initial submission of the monitoring plan for the emissions unit under 40 CFR 75.62\*; or
    - (BB) if an emissions unit does not have capacity factor data for one (1) or more of the three (3) calendar years immediately preceding the date of initial submission of the monitoring plan for the unit under 40 CFR 75.62\*, all available capacity factor data, beginning with the date on which the emissions unit commenced commercial operation, and projected capacity factor data.
  - (ii) For a unit for which a monitoring plan has already been submitted under 40 CFR 75.62\*, that has not qualified as a peaking unit under item (i), and where capacity factor changes, the designated

representative submits either:

(AA) three (3) calendar years of data following the change in the emissions unit's capacity factor showing an average capacity factor of not more than ten and zero-tenths percent (10.0%) during the three (3) previous calendar years and a capacity factor of not more than twenty and zero-tenths percent (20.0%) in each of those calendar years; or

(BB) one (1) calendar year of data following the change in the emissions unit's capacity factor showing a capacity factor of not more than ten and zero-tenths percent (10.0%) and a statement that this changed pattern of operation resulting in a capacity factor less than ten and zero-tenths percent (10.0%) is considered permanent and is projected to continue for the foreseeable future.

(C) For purposes of 40 CFR 75\*, an emissions unit that initially qualifies as a peaking unit must meet the criteria in clause (A) each year in order to continue to qualify as a peaking unit. If such an emissions unit fails to meet such criteria for a given year, the emissions unit no longer qualifies as a peaking unit starting January 1 of the year after the year for which the criteria are not met. If an emissions unit failing to meet the criteria in clause (A) initially qualified as a peaking unit under clause (B), the emissions unit may qualify as a peaking unit for a subsequent year only if the designated representative submits the data specified in clause (B)(ii)(AA).

(D) An emissions unit required to comply with the provisions of Subpart H of 40 CFR 75\*, under a state or federal NO<sub>x</sub> mass emissions reduction program, may, pursuant to 40 CFR 75.74(c)(11)\*, qualify as a peaking unit on an ozone season basis rather than an annual basis, if the owner or operator reports NO<sub>x</sub> mass emissions and heat input data only during the ozone season.

(14) "Predictive emission monitoring system" or "PEMS" means a system that uses process and other parameters as inputs to a computer program or other data reduction system to produce values in terms of the applicable emission limitation or standard.

(15) "QA operating quarter" means a calendar quarter in which there are at least one hundred sixty-eight (168) unit operating hours, as defined in subdivision (25), or, for a common stack or bypass stack, a calendar quarter in which there are at least one hundred sixty-eight (168) stack operating hours, as defined in subdivision (24).

~~(14) (16) "Quality assurance" means those activities performed to ensure that monitoring data are sufficiently representative, accurate, precise, reliable, frequent, and timely. Those activities include, but are not limited to, frequent activities (daily) and less frequent activities (weekly, monthly, quarterly, and yearly). establish validity of data used to demonstrate compliance.~~

(17) "Stack operating hour" means a clock hour during which flue gases flow through a particular stack or duct, either for the entire hour or for part of the hour, while any associated emissions units are combusting fuel.

(18) "Unit operating hour" means a clock hour during which an emissions unit combusts any fuel, either for part of the hour or for the entire hour.

\*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Air Pollution Control Board; [326 IAC 3-4-1](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2062; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1566; filed Aug 26, 2004, 11:30 a.m.: 28 IR 30)

SECTION 2. [326 IAC 3-4-2](#) IS AMENDED TO READ AS FOLLOWS:

### **[326 IAC 3-4-2](#) Certification**

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 2. Each report submitted under this article shall contain a certification of truth, accuracy, and completeness. This certification and any other certification required under this article shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Reports submitted under [326 IAC 3-8](#) shall meet the certification requirements of [326 IAC 2-7-4\(f\)](#).

(Air Pollution Control Board; [326 IAC 3-4-2](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2063; readopted filed Jan 10,

SECTION 3. [326 IAC 3-4-3](#) IS AMENDED TO READ AS FOLLOWS:

**[326 IAC 3-4-3](#) Conversion factors**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-15](#); [IC 13-17](#)

Sec. 3. (a) Owners or operators of facilities **emissions units** subject to this article shall use the following procedures for converting monitoring data to units of the standard where necessary:

(1) ~~For The owner or operator of a fossil fuel-fired steam generators,~~ **generator shall use** the following procedures ~~shall be used~~ to convert gaseous emission monitoring data in parts per million (ppm) to pounds per million British thermal units (Btu) (lbs/MMBtu) where necessary:

(A) When the owner or operator of a fossil fuel-fired steam generator elects under this article to measure oxygen (O<sub>2</sub>) in flue gases, the ~~measurements of owner or operator shall measure~~ the pollutant concentration and oxygen ~~shall be~~ on a dry basis and **use** the following conversion procedure: ~~used:~~

$$E = CF \frac{(20.9)}{(20.9 - \%O_2)}$$

(B) When the owner or operator elects under this article to measure carbon dioxide (CO<sub>2</sub>) in flue gases, the ~~measurement of owner or operator shall measure~~ the pollutant concentration and the CO<sub>2</sub> concentration ~~shall each be~~ on a consistent basis (wet or dry) and **use** the following conversion procedure: ~~used:~~

$$E = CF_c \frac{(100)}{(\%CO_2)}$$

(C) When the owner or operator elects under this article to measure sulfur dioxide (SO<sub>2</sub>) or nitrogen oxides (NO<sub>x</sub>) in the flue gases, the ~~measurement of owner or operator shall measure~~ the diluent concentration and the SO<sub>2</sub> ~~and or~~ the NO<sub>x</sub> concentration ~~shall each be~~ on a wet basis and **use** the following conversion procedure, ~~used,~~ except where wet scrubbers are employed or where moisture is otherwise added to the stack gases:

$$E = C_{ws} F_w \frac{(20.9)}{(20.9 (1 - B_{ws}) - \%O_{2ws})}$$

(D) When the owner or operator elects under this article to measure SO<sub>2</sub> or NO<sub>x</sub> in the flue gases, the ~~measurement of owner or operator shall measure~~ the diluent concentration and the SO<sub>2</sub> ~~and or~~ the NO<sub>x</sub> concentration ~~shall each be~~ on a wet basis and **use** the following conversion procedure, ~~shall be used~~ where wet scrubbers or moisture is otherwise present in the stack gases, provided water vapor content of the stack gas is measured at least once every fifteen (15) minutes at the same point as the pollutant and oxygen measurements are made:

$$E = C_{ws} F \frac{(20.9)}{(20.9 (1 - B_{ws}) - \%O_{2ws})}$$

(E) The values used in the equations under this subdivision are derived as follows:

$C_{ws}$  = Pollutant concentration at stack conditions in grams per wet standard cubic meter (g/wscm) or pounds per wet standard cubic meter (lbs/wscm), determined by multiplying the average concentration in parts per million (ppm) for each one (1) hour period by  $4.15 \times 10^{-5}$  M g/wscm per ppm or  $2.59 \times 10^{-9}$  M lbs/wscm per ppm, where M is pollutant molecular weight in grams per gram-mole (g/g-mole) or pounds per pound-mole (lb/lb-mole).

- M = 64.07 for SO<sub>2</sub> and 46.01 for oxides of nitrogen (NO<sub>x</sub>) as NO<sub>2</sub>.
- C = Pollutant concentration at stack conditions in pounds per dry standard cubic meter (lbs/dscm) or grams per dry standard cubic meter (g/dscm).
- F, F<sub>c</sub> = A factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted (F<sub>c</sub>), respectively. Values of F and F<sub>c</sub> are given in 40 CFR 60, Appendix A, Method 19\*, as applicable.
- F<sub>w</sub> = A factor representing a ratio of the volume of wet flue gases generated to the calorific value of the fuel combusted. Values of F<sub>w</sub> are given in 40 CFR 60, Appendix A, Method 19\*.
- B<sub>wa</sub> = Proportion by volume of water vapor in the ambient air.
- B<sub>ws</sub> = Proportion by volume of water vapor in the stack gas.
- E = Pollutant emission, lbs/MMBtu.
- Percent O<sub>2</sub>,  
percent CO<sub>2</sub> = Oxygen or carbon dioxide volume (expressed as percent) determined with equipment specified under this article.
- Percent O<sub>2ws</sub> = Oxygen volume (expressed as percent) measurements made at stack conditions on a wet basis.

(2) For sulfuric acid plants, ~~or production facilities~~, the owner or operator shall:

- (A) establish a conversion factor three (3) times daily according to the procedures of 40 CFR 60.84(b)\*;
- (B) multiply the conversion factor by the average sulfur dioxide (SO<sub>2</sub>) concentration in the flue gases to obtain average SO<sub>2</sub> emissions in pounds per ton (lbs/ton); and
- (C) report the average sulfur dioxide emissions for each three (3) hour period in excess of the emission standard set forth in [326 IAC 7](#) in the quarterly ~~summary~~ **report**.

(b) **The department may approve** alternate procedures for computing emission averages that do not require integration of data or alternative methods of converting pollutant concentration measurements to units of the emission standard ~~may be approved by the department~~ if the owner or operator shows that the alternate procedures are at least as accurate as those in this rule.

\*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Air Pollution Control Board; [326 IAC 3-4-3](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2063; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1566; filed Aug 26, 2004, 11:30 a.m.: 28 IR 31)

SECTION 4. [326 IAC 3-5-1](#) IS AMENDED TO READ AS FOLLOWS:

**[326 IAC 3-5-1](#) Applicability; continuous monitoring requirements for applicable pollutants**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 1. (a) ~~This rule establishes the following:~~

(1) ~~Substantive requirements for monitoring certain types of sources.~~

(2) ~~A process for developing suitable monitoring requirements for other types of sources.~~

~~(b) (a) This rule applies to the following sources and facilities hereinafter referred to as affected facilities: or emissions units to determine compliance with an emission limitation or standard:~~



- (1) Any ~~facility~~ **emissions unit** required to perform continuous monitoring under [326 IAC 12](#), which incorporates by reference the requirements of 40 CFR 60\*, or by a standard for hazardous air pollutants under [326 IAC 14](#), which incorporates by reference the requirements of 40 CFR 61\*, or [326 IAC 20](#), which incorporates by reference the requirements of 40 CFR 63\*.
- (2) Fossil fuel-fired steam generators of greater than one hundred million (100,000,000) British thermal units ~~(Btus)~~ **(Btu)** per hour heat input capacity.
- (3) Sulfuric acid plants or production facilities of greater than three hundred (300) tons per day acid production capacity.
- (4) Petroleum refinery catalyst regenerators for fluid bed catalytic cracking units of greater than twenty thousand (20,000) barrels or eight hundred forty thousand (840,000) gallons per day fresh feed capacity.
- (5) Portland cement plants.
- (6) ~~Facilities~~ **Sources or emissions units** that combust sewage sludge.
- (7) Sources or emissions units making coke from raw materials, including the following:
  - (A) Coal refining byproducts.
  - (B) Petroleum refining byproducts.
- (8) ~~Facilities~~ **Emissions units** in Clark and Floyd Counties that:
  - (A) have potential to emit **nitrogen oxides (NO<sub>x</sub>)** of greater than or equal to forty (40) tons per year; and
  - (B) are located at sources that have potential to emit NO<sub>x</sub> of greater than or equal to one hundred (100) tons per year as described in [326 IAC 10](#).
- (9) Any emissions unit required to monitor under subsection (c).**

~~(e)~~ **(b) Owners and operators of sources and facilities or emissions units** described in subsection ~~(b)~~ **(a)** are subject to the following requirements:

- (1) Any ~~facility~~ **emissions unit** subject to [326 IAC 12](#) which incorporates by reference the requirements of 40 CFR 60\*, [326 IAC 14](#), which incorporates by reference the requirements of 40 CFR 61\*, or [326 IAC 20](#), which incorporates by reference the requirements of 40 CFR 61\*, shall comply with the following:
  - (A) The monitoring and reporting requirements as specified for the applicable rule.
  - (B) All requirements of this rule.
- (2) **The owner or operator of a fossil fuel-fired steam generators generator** of greater than one hundred million (100,000,000) Btu per hour heat input capacity shall **continuously** monitor the following:
  - (A) Opacity, unless **one (1) of the following occurs**:
    - (i) Gaseous fuel is the only fuel combusted.
    - (ii) Oil or a mix of gas and oil are the only fuels combusted and the ~~facility~~ **emissions unit** is able to comply with both of the following **rules** without using particulate matter collection equipment:
      - (AA) [326 IAC 5-1](#).
      - (BB) [326 IAC 6-2](#).
    - (iii) An alternative monitoring requirement request has been granted by the department **and approved by U.S. EPA. The owner or operator may request** an alternative monitoring requirement ~~may be requested~~ when installation of an opacity monitoring system would not provide accurate determinations of emissions as a result of interference from condensed uncombined water vapor. Any alternative monitoring requirement request shall address the following:
      - (AA) Information pertaining to the inability of the affected ~~facility~~ **emissions unit** to find an acceptable monitoring location prior to the source of the condensed, uncombined water vapor.
      - (BB) A list of proposed alternative monitoring requirements. For each proposed alternative monitoring requirement, the request must provide a detailed description of thresholds or triggers for corrective action resulting from deviation from normal operating parameters and how deviations from key surrogate parameters shall be addressed to ~~insure~~ **ensure** continuous compliance with all applicable particulate and opacity requirements. An example of an acceptable alternative monitoring requirement is a particulate compliance demonstration that is ~~no less frequent than annual~~ **performed at least annually**, in accordance with [326 IAC 3-6](#) and a compliance monitoring plan that, at a minimum, satisfies monitoring requirements under [326 IAC 2-7](#) or [326 IAC 2-8](#).
      - (CC) Record keeping that is consistent with section 6 of this rule.
      - (DD) Reporting frequency that is no less frequent than that required in section 7 of this rule.
    - (iv) An alternative monitoring requirement request granted by the department under item (iii) shall be submitted to U.S. EPA as a **state implementation plan (SIP)** revision and shall not be in effect until approved as a SIP revision.
  - (B) Sulfur dioxide (SO<sub>2</sub>) under the following conditions:
    - (i) SO<sub>2</sub> pollution control equipment has been installed.
    - (ii) A monitor is required to determine compliance with either: ~~of the following~~:
      - (AA) [326 IAC 12](#); or

- (BB) a **new** construction permit **or operating permit** required under [326 IAC 2](#).
- (C) Nitrogen oxide (NO<sub>x</sub>) under the following conditions:
- (i) NO<sub>x</sub> pollution control equipment has been installed.
  - (ii) A monitor is required to determine compliance with either: ~~of the following:~~
- (AA) [326 IAC 12](#); **or**
  - (BB) a **new** construction permit **or operating permit** required under [326 IAC 2](#).
- (D) The percent **oxygen** (O<sub>2</sub>) **or carbon dioxide** (CO<sub>2</sub>) if measurements of O<sub>2</sub> or CO<sub>2</sub> in the flue gas are required to convert either SO<sub>2</sub> or NO<sub>x</sub> continuous monitoring data, or both, to units of the emission limitation for the particular ~~facility.~~ **emissions unit.**
- (3) Sulfuric acid plants ~~or production facilities~~ of greater than three hundred (300) tons per day acid production capacity shall monitor SO<sub>2</sub> for each sulfuric acid producing ~~facility~~ **emissions unit** within the source.
- (4) Petroleum refinery catalyst regenerators for fluid bed catalytic cracking units of greater than twenty thousand (20,000) barrels **or** eight hundred forty thousand (840,000) gallons per day fresh feed capacity shall monitor opacity for each regenerator within the source.
- (5) Portland cement plants shall monitor opacity at the following ~~facilities:~~ **emissions units:**
- (A) Kilns.
  - (B) Clinker coolers.
- (6) ~~Facilities~~ **Sources or emissions units** that combust sewage sludge shall monitor from the effluent gas exiting ~~the~~ incinerator the following:
- (A) Total hydrocarbons.
  - (B) Oxygen.
  - (C) Moisture, unless an alternative method is approved by the department and the U.S. EPA.
  - (D) Temperature.
- (7) Sources **or emissions units** making coke from coal shall monitor opacity on the underfire stack associated with each coke oven battery.
- (8) ~~Facilities~~ **Emissions units** in Clark and Floyd counties that have potential to emit NO<sub>x</sub> greater than or equal to forty (40) tons per year and are located at sources that have potential to emit NO<sub>x</sub> greater than or equal to one hundred (100) tons per year shall install NO<sub>x</sub> continuous emission monitors as described in [326 IAC 10-1](#).
- (c) Upon approval by the department, the owner or operator of an emissions unit required to continuously monitor opacity under this section may be exempted from the requirement to install, certify, and operate a COMS if:**
- (1) a particulate CEMS for measuring PM emissions is used to demonstrate continuous compliance with any applicable emissions limitation; and**
  - (2) the particulate CEMS is installed, certified, operated, and maintained on the affected source in accordance with the requirements of Performance Specification 11 (PS-11)\* and Procedure 2 of 40 CFR 60, Appendix F\*.**
- (d) The department may require, as a condition of a construction or operating permit issued under ~~326 IAC 2-1, 326 IAC 2-1.1, 326 IAC 2-2, 326 IAC 2-3, 326 IAC 2-7, 326 IAC 2-8, or 326 IAC 2-9~~ that the owner or operator of a new or existing source of air emissions monitor emissions to ensure compliance with the following:
- (1) An emission limitation or standard established in one (1) of the permits listed in this subsection.
  - (2) Permit requirements.
  - (3) Monitoring requirements in [326 IAC 7](#).
- (e) Unless explicitly stated otherwise, nothing in this rule shall:
- (1) excuse the owner or operator of a source **or emissions unit** from any monitoring, record keeping, or reporting requirement that applies under any provision of the CAA or state statutes ~~or regulations;~~ **rules; or**
  - (2) restrict the authority of the department to impose additional or more restrictive monitoring, record keeping, testing, or reporting requirements on any owner or operator of a source **or emissions unit** under any other provision of the CAA, including Section 114(a)(1), or state statutes ~~or regulations;~~ **rules,** as applicable.
- (f) ~~Within one hundred eighty (180) days of startup or, for a source existing on the effective date of this rule, within three hundred sixty five (365) days of becoming an affected facility under this rule, All continuous monitoring systems shall be installed and operational and have the certification testing complete pursuant to under section 3 of this rule~~ **within one hundred eighty (180) days of start-up of the emissions unit.**

\*Copies of these documents may be obtained from the Government Printing Office, 732 North Capitol Street

NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Air Pollution Control Board; [326 IAC 3-5-1](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2064; filed Dec 20, 2001, 4:30 p.m.: 25 IR 1596; errata filed Jan 7, 2002, 2:20 p.m.: 25 IR 1644)

SECTION 5. [326 IAC 3-5-2](#) IS AMENDED TO READ AS FOLLOWS:

**[326 IAC 3-5-2](#) Minimum performance and operating specifications**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 2. Owners and operators of monitoring equipment installed to comply with this rule shall comply with the performance specifications and operating requirements as follows:

(1) Performance specifications set forth in 40 CFR 60, Appendix B\*, shall be used to certify monitoring equipment installed pursuant to this rule; however, where reference is made to the administrator in 40 CFR 60, Appendix B\*, the term "department" shall be inserted for purposes of this rule, and where continuous emissions monitors were installed prior to March 1983 for measuring opacity, the performance specifications in 40 CFR 60, Appendix B\*, 1982 Edition, shall apply.

(2) Cycling times, which include the total time a monitoring system requires to sample, analyze, and record an emission measurement, shall be as follows:

(A) Continuous monitoring systems for measuring opacity shall complete a minimum of one (1) cycle of operation (sampling, analyzing, and data recording) for each successive ten (10) second period.

(B) Continuous monitoring systems that measure the following emissions shall complete a minimum of one (1) cycle of operation (sampling, analyzing, and data recording) for each successive fifteen (15) minute measuring period:

(i) Carbon dioxide (CO<sub>2</sub>).

(ii) Carbon monoxide (CO).

(iii) Hydrogen sulfide (H<sub>2</sub>S).

(iv) Oxides of nitrogen (NO<sub>x</sub>).

(v) Oxygen (O<sub>2</sub>).

(vi) Sulfur dioxide (SO<sub>2</sub>).

(vii) Total hydrocarbons (THC).

(viii) Total reduced sulfur (TRS).

(ix) Volatile organic compounds (VOC).

**(x) Particulate matter (PM).**

(3) For opacity monitoring when effluent from two (2) or more affected facilities is **emissions units are** combined before being released to the atmosphere, the owner or operator may either **install a COMS:**

(A) ~~install a continuous opacity monitoring system~~ on the combined effluent; or

(B) ~~install a continuous opacity monitoring system~~ comprised of, and capable of combining the signals from, component transmissometers on each effluent stream.

Results shall be reported on combined effluent. This requirement shall not apply to facilities utilizing **emissions units using** wet flue gas desulfurization equipment. For facilities **emissions units** using wet flue gas desulfurization equipment, opacity may be reported on the combined exhaust or on individual exhausts except as provided for facilities **emissions units** affected by an NSPS as described at 40 CFR 60.13(i)\*.

Compliance for facilities **emissions units** that opt to report on the individual exhausts shall be determined on the individual exhausts based on data provided in accordance with section 7 of this rule.

(4) When the effluent from two (2) or more affected facilities **emissions units** subject to the same emission standard, other than opacity, are combined before being released to the atmosphere, the owner or operator may report the results as required for each affected facility **emissions unit** or for the combined effluent.

(5) Instrument full-scale response or upper limit of concentration measurement range for all opacity monitoring systems shall be set at one hundred percent (100%) opacity if possible. If the monitoring system is a ~~requirement of~~ **required by** 40 CFR 60\*, 40 CFR 61\*, 40 CFR 63\*, or 40 CFR 75\*, then the appropriate instrument span values and cycling times pursuant to the applicable part shall be used. In all cases, the manufacturer's procedures for calibration shall be followed and may result in an upscale maximum response of less than one hundred percent (100%). The minimum instrument full-scale response for gaseous monitoring systems shall be set at two hundred percent (200%) of the expected instrument data display output

corresponding to the emission limitation for the ~~facility~~ **emissions unit** unless a request for an alternative setting that provides the following information is submitted to and approved by the department **and U.S. EPA** in writing:

- (A) The proposed alternate instrument span value.
- (B) The expected range of pollutant measured concentrations.
- (C) The control device in use.
- (D) The process to be controlled.
- (E) The location of the monitor, such as stack or duct.
- (F) The reason for requesting the alternate instrument span value.

(6) **The department and U.S. EPA may approve** locations for installing continuous monitoring systems or monitoring devices that vary from locations provided under the performance specifications of 40 CFR 60, Appendix B\*, ~~shall be approved by the department and the U.S. EPA~~ upon a demonstration by the owner or operator that installation at alternative locations will enable accurate and representative measurements.

(7) Owners or operators of affected ~~facilities~~ **emissions units** shall conduct ~~continuous emission monitoring system~~ **CEMS** performance evaluations, upon the request of the department **or U.S. EPA**, to demonstrate continuing compliance of the ~~continuous emission monitoring systems~~ **CEMS** with performance specifications as follows:

(A) A performance evaluation is a quantitative and qualitative evaluation of the performance of the continuous emission monitor in terms of:

- (i) accuracy;
- (ii) precision;
- (iii) reliability;
- (iv) representativeness; and
- (v) comparability;

of the data acquired by the monitoring system.

(B) The department **or U.S. EPA** may request owners or operators of affected ~~facilities~~ **emissions units**, as defined **described** in section 1(b) of this rule, to conduct ~~continuous emission monitoring system~~ **CEMS** performance evaluations if the department has reason to believe, based on review of monitoring data, quality assurance data, inspections, or other information, that the ~~continuous emission monitoring system~~ **CEMS** is malfunctioning or may be providing invalid data over an extended period.

(C) **The owner or operator of an affected emissions unit shall submit** a written report containing the complete information of the performance evaluations ~~shall be furnished~~ to the department within forty-five (45) days after the test date. The department **or U.S. EPA** may conduct performance evaluations of the ~~continuous emission monitoring systems~~ **CEMS** at any time in order to verify the continued compliance of the systems with the performance specifications.

\*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Air Pollution Control Board; [326 IAC 3-5-2](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2066; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1566; filed Aug 26, 2004, 11:30 a.m.: 28 IR 32)

SECTION 6. [326 IAC 3-5-3](#) IS AMENDED TO READ AS FOLLOWS:

### [326 IAC 3-5-3](#) Monitor system certification

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 3. Monitor system certification requirements apply to sources ~~and facilities~~ **or emissions units** subject to this rule as follows:

(1) The owner or operator shall conduct the applicable performance specifications tests in accordance with the procedures specified in 40 CFR 60\*, or other applicable federal regulations, for the required monitoring system as follows:

- (A) Not later than one hundred eighty (180) days after a ~~facility~~ **emissions unit** start-up or initial monitor installation date.
- (B) Not later than forty-five (45) **emissions unit** operating days after **the date of** monitor replacement, ~~date,~~



or significant monitor repair as described in IDEM's ~~Quality Assurance~~ **Compliance Branch Continuous Emissions Monitoring Guidance Manual, Chapter 20 (dated June 20, 1997)\*\* Chapters 1 and 2\* (December 1999)**, which affects the ability of the analyzer to ~~function date:~~ **measure emissions accurately.**

- (2) The owner or operator shall notify the department in writing as follows:
  - (A) No less than fourteen (14) days in advance of the start of continuous opacity monitor (COM) certification.
  - (B) No less than thirty-five (35) days in advance of the certification of a gaseous monitoring system.
- (3) The owner or operator shall submit all ~~of~~ the required test data and information in the form of a written report to the department for review and approval within forty-five (45) days of completion of the performance specification test.
- (4) The department shall issue a written notice of certification status upon review of the complete certification test report. A required monitoring system is certified when the department issues a certification letter stating that the required monitoring system, including all applicable components, has satisfactorily met all federal and state monitoring requirements.
- (5) The department may decertify a required monitoring system if an audit or performance evaluation reveals that ~~such the~~ monitoring system or a component thereof does not meet applicable performance specifications or requirements. The owner or operator shall repeat the certification process for the required monitoring system within forty-five (45) days of the date of the department's decertification of the required monitoring system.

~~\*This document is~~ **\*These documents are** incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

~~\*\*This document is incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.~~

*(Air Pollution Control Board; [326 IAC 3-5-3](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2067; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1567; filed Aug 26, 2004, 11:30 a.m.: 28 IR 33)*

SECTION 7. [326 IAC 3-5-4](#) IS AMENDED TO READ AS FOLLOWS:

#### **[326 IAC 3-5-4](#) Standard operating procedures**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 4. (a) ~~The owner or operator of each affected facility specified in section 1(b) of this rule, any facility subject to [326 IAC 12](#), or any other facility required to monitor emissions on a continuous basis shall submit to the department, Within ninety (90) days after monitor installation, a complete, written continuous monitoring standard operating procedures~~ **procedure (SOP) must be submitted to the department by the owner or operator of:**

- (1) each affected source or emissions unit specified in section 1(a) of this rule; or**
- (2) any other source or emissions unit required to monitor emissions on a continuous basis.**

**(b) If revisions are made to the SOP, the owner or operator must submit updates shall be submitted to the department biennially: within two (2) years of the revisions.**

**(c) At a minimum, the SOP shall describe complete step-by-step procedures and operations as follows:**

- (1) A description of the facility emissions unit monitored.**
- (2) A listing of the following for each monitor:**
  - ~~(A) Each monitor's brand.~~
  - (A) Manufacturer's name.**
  - (B) Model number.
  - (C) Serial number.
  - (D) Monitoring location.
  - (E) Data handling and acquisition system.

- (3) Examples of all reporting and log forms.
- (4) Record keeping and reporting procedures that include the following:
  - (A) Reporting of instrument precision and accuracy.
  - (B) Reporting of emissions data.
- (5) Methods and procedures for analysis and data acquisition.
- (6) Calibration procedures that include the following:
  - (A) Calibration error limits and linearity.
  - (B) Calibration gas type, gas quality, and traceability to the National Institute of Standards and Technology.
  - (C) Calibration frequency.
  - (D) Criteria for recalibration, and analysis procedures to periodically verify the accuracy of span and calibration standards.
- (7) Operation procedures that include:
  - (A) daily procedures;
  - (B) quantifying and recording daily zero (0) and high level drift that meet the requirements of:
    - (i) 40 CFR 60, Appendix B\*, Performance Specification 2, Section 4.2; or
    - (ii) other applicable regulations; and
  - (C) other operating parameter checks indicating correct operational status.
- (8) Quality control and quality assurance procedures that include the following:
  - (A) A statement of quality policy and objectives.
  - (B) Organization and responsibilities description.
  - (C) Calibration and span and zero (0) drift criteria.
  - (D) Excessive drift criteria.
  - (E) Corrective action for excessive drift.
  - (F) Precision and accuracy audits.
  - (G) Corrective action for accuracy audits failure.
  - (H) Data validity criteria.
  - (I) Participation in department audits.
  - (J) Data recording and calculation audits.
- (9) Preventive maintenance procedures and corrective maintenance procedures that include those procedures taken to ensure continuous operation and to minimize malfunctions.
- (10) A listing of the manufacturer's recommended spare parts inventory.

~~(b)~~ **(d)** If a ~~facility~~ **emissions unit** owner or operator fails to submit a SOP or submits a SOP that fails to address the ~~factors~~ **procedures and operations** provided under subsection ~~(a)~~, **(c)**, the department may require a performance evaluation pursuant to section 2 of this rule.

\*This document is incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

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## SECTION 8. [326 IAC 3-5-5](#) IS AMENDED TO READ AS FOLLOWS:

### [326 IAC 3-5-5](#) Quality assurance requirements

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 5. (a) Except ~~where for affected units under 40 CFR 75\* is applicable for affected facilities under the acid-rain program~~ **that are also emissions units subject to this rule**, quality assurance requirements specified in this section and 40 CFR 60\*, Appendix F, apply to continuous emission monitors that monitor the following:

- (1) Carbon dioxide (CO<sub>2</sub>).
- (2) Carbon monoxide (CO).
- (3) Hydrogen sulfide (H<sub>2</sub>S).
- (4) Nitrogen oxide (NO<sub>x</sub>).
- (5) Oxygen (O<sub>2</sub>).

- (6) Sulfur dioxide (SO<sub>2</sub>).
- (7) Total hydrocarbons (THC).
- (8) Total reduced sulfur (TRS).
- (9) Volatile organic compounds (VOC).
- (10) Particulate matter (PM).**

(b) ~~Facilities~~ **Emissions units** that are **also** subject to 40 CFR 75\* shall follow the quality assurance procedures of 40 CFR 75\* and report the results in accordance with subsection ~~(e)~~: **(f)**.

(c) Quality control (QC) requirements for ~~continuous opacity monitoring systems~~ COMS are as follows:

- (1) For calibration drift (CD) assessment, the COMS shall be checked at least once daily. The CD shall be quantified and recorded at zero (0) (or low level) and upscale level opacity. The COMS shall be adjusted whenever the CD exceeds the specification of 40 CFR 60, Appendix B\*, Performance Specification 1 (PS-1), and the COMS shall be declared out of control when the CD exceeds twice the specification of PS-1. Corrective actions, followed by a validating CD assessment, are required when the COMS is out of control.
- (2) For fault indicators assessment, the fault lamp indicators, data acquisition system error messages, and other system self-diagnostic indicators shall be checked at least daily. Appropriate corrective actions shall be taken when the COMS is operating outside the preset limits.
- (3) For performance audits, checks of the individual COMS components and factors affecting the accuracy of the monitoring data, as described in this subdivision, shall be conducted, at a minimum, on a calendar quarter basis. The absolute minimum checks included in the performance audit are as follows:

(A) The status of the optical alignment of the monitor components shall be checked and recorded according to the procedure specified by the monitor manufacturer. Monitor components must be realigned as necessary.

(B) The apparent effluent opacity shall be compared and recorded before and after cleaning each of the exposed optical surfaces. The total optical surface dust accumulation shall be determined by summing up the apparent reductions in opacity for all of the optical surfaces that are cleaned. ~~Caution should be employed in performing this check since fluctuations in effluent opacity occurring during the cleaning cycle may adversely affect the results.~~

(C) The zero (0) and upscale response errors shall be determined and recorded according to the CD procedures. The errors are defined as the difference (in percent opacity) between the correct value and the observed value for the zero (0) and high level calibration checks.

(D) The value of the zero (0) compensation applied at the time of the audit shall be calculated as equivalent opacity, corrected to stack exit conditions, according to the procedures specified by the manufacturer. The compensation applied to the effluent recorded by the monitor system shall be recorded.

(E) The optical pathlength correction ratio (OPLR) shall be computed from the monitor pathlength and stack exit diameter and shall be compared, and the difference recorded, to the monitor setup OPLR value. The stack exit correlation error shall be determined as the absolute value of the difference between the measured value and the correct value, expressed as a percentage of the correct value.

(F) A three-point calibration error test of the COMS shall be conducted. Three (3) neutral density filters meeting the requirements of PS-1 shall be placed in the COMS light beam path. The monitor response shall be independently recorded from the COMS permanent data recorder. ~~Make~~ A total of five (5) nonconsecutive readings for each filter **shall be made**. The low-range, mid-range, and high-range calibration error results shall be computed as the mean difference and ninety-five percent (95%) confidence interval for the difference between the expected and the actual responses of the monitor as corrected to stack exit conditions. These values shall be calculated using the procedure of PS-1, Section 8.0. The following are requirements for these values:

- (i) The calibration error test requires the installation of an external calibration audit device (zero-jig). The zero-jig shall be adjusted to provide the same zero (0) response as the monitor's simulated zero (0).
- (ii) Use calibration attenuators, that is, neutral density filters or screens, with values that have been determined according to PS-1, Section 7.1.3, "Attenuator Calibration", and produce simulated opacities (as corrected to stack exit conditions) in the ranges listed in Table 1-2 in PS-1.
- (iii) The stability of the attenuator values shall be checked at least once per year according to the procedures specified in PS-1. The attenuators shall be recalibrated if the stability checks indicate a change of two percent (2%) opacity or greater.

(4) The following are requirements for monitor acceptance criteria:

(A) The following criteria are to be used ~~for determining~~ **to determine** if the COMS audit results are acceptable:

TABLE 1. PERFORMANCE AUDIT CRITERIA

Stack Exit Correlation Error  $\leq 2$  percent

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Zero and Upscale Responses	≤ 2 percent opacity
Zero Compensation	≤ 4 percent opacity
Optical Alignment	Misalignment error
	≤ 2 percent opacity
Optical Surface Dust Accumulation	≤ 4 percent opacity
Calibration Error	≤ 3 percent opacity

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(B) The COMS is out of control whenever the results of a quarterly performance audit indicate noncompliance with any of the performance assessment criteria of Table 1 in clause (A). If the COMS is out of control, the owner or operator ~~must~~ **shall** take the action necessary to eliminate the problem. Following corrective action, the source **or emissions unit** owner or operator ~~must~~ **shall** reconduct the appropriate failed portion of the audit and other applicable portions to determine whether the COMS is operating properly and within specifications. The COMS owner or operator shall record both audit results showing the COMS to be out of control and the results following corrective action. ~~COMS data obtained during any out-of-control period may not be used for compliance determination; the data may be used for identifying periods where there has been a failure to meet quality assurance and control criteria.~~

(C) Repeated audit failures, that is, out of control conditions ~~resulting from~~ **revealed in** the quarterly audits, indicate that the QC procedures are inadequate or the COMS is incapable of providing quality data. The source **or emissions unit** owner or operator shall:

- (i) increase the frequency of the ~~above~~ QC procedures **in this subsection** until the performance criteria are maintained; or
- (ii) modify or replace the COMS whenever two (2) consecutive quarters of unacceptable performance occur.

(5) The performance audit calculations contained in PS-1, Section 8 shall be followed.

(d) Except where 40 CFR 75\* is applicable for affected facilities **emissions units** under the acid rain program, **and except for peaking units as defined in 326 IAC 3-4-1(13)**, quality control requirements for flow monitoring systems are as follows:

- (1) For CD assessment, the flow monitoring system shall be checked at least once daily. The CD shall be quantified and recorded at zero (0) (or low level) and upscale level. The flow monitoring systems shall be adjusted whenever the CD exceeds the specification of 40 CFR 60, Appendix B, Performance Specification 6 (PS-6)\*, and the flow monitoring systems shall be declared out of control when the CD exceeds twice the specification of PS-6. Corrective actions, followed by a validating CD assessment, are required when the flow monitoring system is out of control.
- (2) An annual relative accuracy test.

**(e) A peaking unit as defined in 326 IAC 3-4-1(13) shall comply with the following quality control requirements:**

**(1) The owner or operator of a peaking unit, based on information submitted by the designated representative in the monitoring plan, shall comply with one (1) of the following:**

**(A) Meet the general operating requirements in 40 CFR 75.10\* for a NO<sub>x</sub> CEMS.**

**(B) Provide information satisfactory to the commissioner using the procedure specified in 40 CFR 75, Appendix E\* for estimating hourly NO<sub>x</sub> emission rate, subject to the following:**

**(i) If, in the years after certification of an excepted monitoring system under 40 CFR 75, Appendix E\*, an emissions unit's operations exceed a capacity factor of twenty percent (20%) in any calendar year or exceed a capacity factor of ten and zero-tenths percent (10.0%) averaged over three (3) years, the owner or operator shall install, certify, and operate a NO<sub>x</sub>-diluent CEMS no later than December 31 of the following calendar year.**

**(ii) If the required CEMS has not been installed and certified by the date in item (i), the owner or operator shall report the maximum potential NO<sub>x</sub> emission rate, as defined in 40 CFR 72.2\*, for each unit operating hour, starting with the first unit operating hour after the deadline and continuing until the CEMS has been provisionally certified.**

**(2) The owner or operator of a peaking unit shall conduct a relative accuracy test audit (RATA) on any required CEMS as follows:**

**(A) Except for mercury monitoring systems and as otherwise specified in 40 CFR 75.21(a)(6)\*, 40 CFR 75.21(a)(7)\*, or 40 CFR 75, Appendix B, Section 2.3.1.2\*, RATA shall be performed once every two (2) successive quality assurance (QA) operating quarters for each primary and redundant backup:**

- (i) SO<sub>2</sub> pollutant concentration monitor;**
- (ii) flow monitor;**



- (iii) CO<sub>2</sub> emissions concentration monitor, including O<sub>2</sub> monitors used to determine CO<sub>2</sub> emissions;
- (iv) CO<sub>2</sub> or O<sub>2</sub> diluent monitor used to determine heat input;
- (v) moisture monitoring system;
- (vi) NO<sub>x</sub> concentration monitoring system;
- (vii) NO<sub>x</sub>-diluent CEMS; or
- (viii) SO<sub>2</sub>-diluent CEMS.

(B) For each primary and redundant backup mercury concentration monitoring system and each sorbent trap monitoring system, RATAs shall be performed once every four (4) successive QA operating quarters.

(C) A calendar quarter that does not qualify as a QA operating quarter shall be excluded in determining the deadline for the next RATA.

(D) Not more than eight (8) successive calendar quarters shall elapse after the quarter in which a RATA was last performed without a subsequent RATA having been conducted.

(E) If a RATA has not been completed by the end of the eighth calendar quarter since the quarter of the last RATA, then the RATA must be completed within a seven hundred twenty (720) unit, or stack, operating hour grace period, as provided in 40 CFR 75, Appendix B, Section 2.3.3,\* following the end of the eighth successive elapsed calendar quarter, or data from the CEMS will become invalid.

(F) The relative accuracy test audit frequency of a CEMS may be reduced, as specified in 40 CFR 75, Appendix B, Section 2.3.1.2\*, for primary or redundant backup monitoring systems that qualify for less frequent testing.

(G) All required RATAs shall be performed in accordance with the applicable procedures and provisions in 40 CFR 75, Appendix A, Sections 6.5 through 6.5.2.2\* and 40 CFR 75, Appendix B, Sections 2.3.1.3\* and 2.3.1.4\*.

(H) For a CO monitor and any other applicable monitor as determined by the commissioner, a RATA shall be performed in accordance with the requirements of this subdivision.

(f) Reporting requirements for performance audits are as follows:

(1) Owners or operators of facilities **emissions units** required to conduct:

- (A) cylinder gas audit;
- (B) relative accuracy test audit; or
- (C) continuous opacity monitor calibration error audit;

on continuous emission monitors shall prepare a written report of the results of the performance audit for each calendar quarter, or for other periods required by the department. **The owner or operator shall submit** quarterly reports ~~shall be submitted~~ to the department within thirty (30) calendar days after the end of each quarter.

(2) The performance audit report shall contain the following information:

(A) Plant and monitor information, including the following:

- (i) The plant name and address.
- (ii) The monitor brand **or manufacturer's name**, model, and serial number.
- (iii) The monitor span.
- (iv) The monitor location. ~~for example, duct, boiler, unit, or stack designation.~~

(B) Performance audit information, including the following:

- (i) The auditor's name.
- (ii) A copy of the audit standard's certification. ~~for example, the vendor's Protocol 1 certification, or neutral density filter certification.~~
- (iii) All data used to calculate the audit results.
- (iv) The audit results and an indication if the monitor passed or failed the audit. If the performance audit results show the CEMS or COMS to be out of control, the CEMS or COMS owner or operator ~~must~~ **shall** report both the audit results showing the CEMS or COMS to be out of control and the results of the audit following corrective action showing the COMS to be operating within specification.
- (v) Any corrective actions performed as the result of a failed audit.

~~(f)~~ **(g) Whenever** a relative accuracy test audit of any continuous emission monitor listed in subsection (a) **or** **(e)** is performed, the department must be notified **in accordance with the protocol requirements of 326 IAC 3-6-2** at least thirty-five (35) days prior to the audit.

\*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

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SECTION 9. [326 IAC 3-5-6](#) IS AMENDED TO READ AS FOLLOWS:

**[326 IAC 3-5-6](#) Record keeping requirements**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 6. (a) On and after the certification of a monitoring system, the owner or operator of a source **or emissions unit** subject to this rule shall maintain records, including raw data, of all monitoring data and supporting information for a minimum of five (5) years from the date of any of the following:

- (1) A monitoring sample.
- (2) A measurement.
- (3) A test.
- (4) A certification.
- (5) A report.
- (6) Any other activity required under this article.

(b) The records described in subsection (a) shall include the following:

- (1) All documentation relating to:
  - (A) design, installation, and testing of all elements of the monitoring system; and
  - (B) required corrective action or compliance plan activities.
- (2) All maintenance logs, calibration checks, and other required quality assurance activities.
- (3) All records of corrective and preventive action.
- (4) A log of plant operations, including **emission unit or monitoring system downtime with the following information:**
  - (A) Date of facility **emissions unit or monitoring system** downtime.
  - (B) Time of commencement and completion of each downtime.
  - (C) Reason for each downtime.
  - (D) **Nature of system repairs and adjustments.**

(c) The owner or operator of a source **or emissions unit** subject to this rule shall maintain the records required by this section at the source ~~or at such other site, in a manner so that they may be inspected by and make them available to~~ the department or the U.S. EPA ~~if so requested or required.~~ **upon request.**

(Air Pollution Control Board; [326 IAC 3-5-6](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2071)

SECTION 10. [326 IAC 3-5-7](#) IS AMENDED TO READ AS FOLLOWS:

**[326 IAC 3-5-7](#) Reporting requirements**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 7. (a) ~~The following reporting requirements apply to sources~~ **owner or operator of a source or emissions unit** subject to this rule **shall submit a monitoring report to the department in accordance with this section.**

(b) **The owner or operator shall submit the monitoring report in accordance with the following requirements:**

- (1) **The owner or operator of sources or emissions units** subject to the requirements of section 1 of this rule shall report excess emissions no less frequently than quarterly. ~~For sources required to report the owner or operator of a source or emissions unit for which quarterly such reports are required, the~~ reports shall be:
  - (A) submitted by the ~~facility~~ **source or emissions unit** owner or operator to the department; and

(B) postmarked or delivered by other means no later than thirty (30) calendar days following the last day of the reporting period.

(2) If a permit specifies or a rule requires more frequent reports, ~~such~~ **the** reports shall be:

(A) submitted by the ~~facility~~ **source or emissions unit** owner or operator to the department; and

(B) postmarked or delivered by other means no later than fifteen (15) calendar days after the end of each month.

(3) Gaseous excess emissions data reports shall be reported using three (3) hour block periods ending at:

(A) 03:00;

(B) 06:00;

(C) 09:00;

(D) 12:00;

(E) 15:00;

(F) 18:00;

(G) 21:00; and

(H) 24:00;

~~For facilities that~~ **unless the emissions unit** must demonstrate compliance with ~~hourly (one (1) hour), a~~ **different averaging period as specified by an applicable rule or permit condition, such as,** daily (twenty-four (24) hour) average, or thirty (30) day averages. ~~such information shall be submitted as part of the quarterly report required in this section.~~

~~(4)~~ **(c)** The monitoring report shall contain the following continuous monitoring information summaries, with all times reported in real time:

~~(A)~~ **(1)** Monitored ~~facility~~ **emission unit** operation time during the reporting period.

~~(B)~~ **(2)** Excess emissions or parameters, as applicable, reported in units of the standard, or the applicable parameter unit as follows:

~~(i)~~ **(A)** Date of excess emissions, or other applicable dates.

~~(ii)~~ **(B)** Time of commencement and completion for each applicable parameter deviation or excess emission data.

~~(C)~~ **(3)** Magnitude of each excess emission as follows:

~~(i)~~ **(A)** For opacity as follows:

~~(AA)~~ **(i)** The actual percent opacity of all six (6) minute (block) averages exceeding the applicable opacity limit shall be reported. If ~~the~~ **an** exceedance occurs continuously beyond one (1) six (6) minute period, the percent opacity for each six (6) minute period or the highest six (6) minute average opacity for the entire period shall be reported.

~~(BB)~~ **(ii)** For department approved opacity averaging times other than six (6) minutes, the actual percent opacity of each averaging period in excess of the applicable limit shall be reported.

~~(CC)~~ **(iii)** A summary by cause shall be prepared and submitted as part of this report itemizing exceedances by cause.

~~(ii)~~ **(B)** For gaseous emissions, the excess emissions, in units of the applicable standard, must be reported based on the applicable averaging time, ~~for example, one (1) hour block, three (3) hour block, three (3) hour rolling;~~ in addition to any other reporting requirements that may be applicable. The averaging time is specified in the applicable federal or state rules, or ~~facility~~ **in the operating permit for the emissions unit.**

~~(5)~~ **(4)** Continuous monitoring system instrument downtime, except for zero (0) and span checks, ~~which shall be reported separately,~~ shall include the following:

(A) Date of downtime.

(B) Time of commencement.

(C) Duration of each downtime.

(D) Reasons for each downtime.

(E) Nature of system repairs and adjustments.

**(d) If there are no excess emissions or monitor downtime in a reporting period, the owner or operator of a emissions unit subject to this rule shall submit a report indicating that no excess emissions or downtime incidents occurred in the reporting period that includes the start and end dates of the time period.**

*(Air Pollution Control Board; [326 IAC 3-5-7](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2071)*

SECTION 11. [326 IAC 3-5-8](#) IS ADDED TO READ AS FOLLOWS:

### **[326 IAC 3-5-8](#) Operation and maintenance of continuous emission monitoring and continuous opacity**

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monitoring systems

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 8. (a) This section applies to the operation and maintenance of CEMS and COMS.

(b) The owner or operator of a CEMS or COMS required by federal or state regulations or permit shall:

- (1) install;
- (2) calibrate;
- (3) maintain;
- (4) operate; and
- (5) certify;

such CEMS or COMS, and related equipment in accordance with applicable federal regulations, this rule, and any applicable permits.

(c) Except for periods when the:

- (1) affected emissions unit is not operating;
- (2) affected source or emissions unit is operating under a scenario that does not require CEMS or COMS;
- (3) CEMS or COMS is experiencing a malfunction; or
- (4) owner/operator is conducting CEMS or COMS quality assurance and quality control activities, including, but not limited to:
  - (A) calibration checks;
  - (B) zero and span adjustments;
  - (C) calibration gas audits; or
  - (D) other required quality assurance/quality control activities;

all CEMS and COMS shall be in continuous operation.

(d) Except as otherwise provided by a rule or provided specifically in a permit, if a CEMS or COMS is malfunctioning or will be down for calibration, maintenance, or repairs for a period of twenty-four (24) hours or more, the owner or operator of the CEMS or COMS shall perform supplemental monitoring in accordance with the permit.

(e) The owner or operator of the CEMS or COMS shall do the following:

- (1) Keep records:
  - (A) in accordance with section 6(b) of this rule; and
  - (B) that describe the supplemental monitoring implemented during any downtime to assure compliance with applicable emission limitations.
- (2) Submit reports, as applicable, in accordance with section 7 of this rule.

(Air Pollution Control Board; [326 IAC 3-5-8](#))

SECTION 12. [326 IAC 3-6-1](#) IS AMENDED TO READ AS FOLLOWS:

**[326 IAC 3-6-1](#) Applicability; test procedures**

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 1. This rule applies to any facility **emissions unit** emissions testing performed to determine compliance with applicable emission limitations contained in this title, or for any other purpose requiring review and approval by the department. ~~(such as an alternate emission factor determination).~~ **The owner or operator of an emissions unit shall conduct** emission tests subject to this rule ~~shall be conducted~~ in accordance with any applicable procedures and analysis methods specified in 40 CFR 51\*, 40 CFR 60\*, 40 CFR 61\*, 40 CFR 63\*, 40 CFR 75\*, or other procedures approved by the department **and U.S. EPA.**



\*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Air Pollution Control Board; [326 IAC 3-6-1](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2072; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1567; filed Aug 26, 2004, 11:30 a.m.: 28 IR 36)

SECTION 13. [326 IAC 3-6-2](#) IS AMENDED TO READ AS FOLLOWS:

**[326 IAC 3-6-2](#) Source sampling protocols**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 2. (a) When an emissions test is to be performed by any person other than the department, the source **or emissions unit owner or operator** shall complete a test protocol form and submit the test protocol form to the department not later than thirty-five (35) days prior to the intended test date unless ~~more notice is required under the applicable program. Such rule requires additional notice.~~ The test protocol shall:

(1) be on a form approved by the department; or shall

(2) contain information equivalent to that required on the form approved by the department.

**The department shall evaluate and approve the test protocol prior it to being implemented. If the department does not notify the owner or operator prior to the test date that the protocol has not been approved, the protocol is deemed approved.**

(b) After evaluating the completed test protocol form, the department may:

(1) inspect the test site; or

(2) require additional conditions, including, but not limited to:

(A) **requiring** reasonable modifications to the stack or duct to obtain acceptable test conditions;

(B) **requiring** additional tests to allow for adverse conditions; ~~such as interferences, nonsteady, or cyclic processes;~~

(C) keeping process operating parameter records, operating logs, or charts during the test;

(D) **placing** conditions on control equipment operation to make the operation of control equipment representative of normal operation; or

(E) recording specified control equipment operating parameters during the test.

(c) If the department requires modification to:

(1) test methods;

(2) analytical methods;

(3) operational parameters; or

(4) other matters included in the emissions test protocol;

the department shall notify the source **or emissions unit owner or operator** and the testing firm by letter or telephone not later than twenty-one (21) days prior to the test date.

(d) If the source **or emissions unit owner or operator** or test firm desires to **make a minor change to** previously submitted procedures or conditions, the department shall be notified of ~~such the minor~~ change as soon as practicable prior to the intended emissions test date. ~~Such~~ **The minor** changes shall not be made unless approved by the department prior to the emission test.

(e) Reasonable changes in the emissions test protocol that result from emergency conditions during the test shall be approved by the department if a department staff person is available at the test site, before the test may proceed.

(f) Post-test approval may be granted based on reasonable changes resulting from emergency or reasonably unforeseeable conditions during the test.

(g) The department reserves the right to conduct any portion of the reference method tests using equipment

supplied by the department. Notice of acceptable test procedures shall be given to the **owner or operator of the source or emissions unit** and its testing representative.

(h) The **source or emissions unit owner or operator** shall schedule an actual test date and time period and notify the department not later than fourteen (14) days prior to the actual test date. In the event that a previously scheduled test must be canceled and rescheduled, the **owner or operator of the source or emissions unit** shall notify the department no less than fourteen (14) days in advance of the rescheduled test date. **Tests rescheduled for less than fourteen (14) days after notifying the department of the rescheduled test date must be approved by the department.**

(Air Pollution Control Board; [326 IAC 3-6-2](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2072)

SECTION 14. [326 IAC 3-6-3](#) IS AMENDED TO READ AS FOLLOWS:

**[326 IAC 3-6-3](#) Emission testing**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 3. (a) Department staff may observe field test procedures and **source or emissions unit** operation during the emission test.

(b) **The owner or operator of a source or emissions unit shall conduct** all emission tests ~~shall be~~ conducted as follows:

(1) ~~While The facility~~ **emissions unit** being tested is ~~shall be~~ operating according to clause (A) or (B), **except as allowed under clause (C), as follows:**

(A) ~~At a minimum, ninety-five percent (95%) to one hundred percent (100%) of its the permitted maximum~~ **emissions unit operating capacity description.**

(B) **Under conditions of worst case emissions, and if the worst case emission condition is not known, then the worst case emission condition shall be assumed to be the maximum process or operating rate of the emissions unit as listed in the permit's emissions unit description.**

(C) **Under other capacities or conditions as specified in an applicable requirement or approved by the department. As used in this clause, "capacity" means the design capacity of the emissions unit or other operating capacities agreed to by the owner or operator of the emissions unit and the department, including, but not limited to, process conditions when the department believes that changes in the operating capacities or operating conditions have the potential to affect emission levels.**

~~(2) Under conditions representative of normal operations.~~

~~(3) Under other capacities or conditions specified and approved by the department. As used in this subdivision, "capacity" means the design capacity of the facility or other operating capacities agreed to by the source and the department.~~

**(2) All test runs for a given pollutant shall be conducted within twenty-four (24) hours unless process variables or mandatory test lengths of greater than two (2) hours make this impracticable. In these cases, the testing shall be conducted on consecutive days. Other periods or duration may be approved by the commissioner.**

(c) Facilities **Emissions units** subject to [326 IAC 12](#), New Source Performance Standards, [326 IAC 14](#), or [326 IAC 20](#) ~~Hazardous Air Pollutants~~, shall be tested under conditions as specified in the applicable provision for that ~~facility~~ **emissions unit** in 40 CFR 60\*, **40 CFR 61\***, or 40 CFR 63\* and this rule where appropriate.

(d) The **owner or operator of a source or emissions unit** shall make available at the test site calibration results of the various sampling components. The information shall include the following:

(1) The date or dates the test was performed.

(2) The methods used.

(3) The **calibration** data.

(4) The results.

All components requiring calibration shall be calibrated within sixty (60) days prior to the actual test date. Post-test calibrations shall be performed on the components not later than forty-five (45) days after the actual test date.

Components requiring calibration are listed in the federal test methods specified in **section 5** of this rule.

(e) The department may perform or require the performance of audits of equipment or procedures associated with the test series up to the time of the actual performance of the test, between test runs, or following the test series. The department reserves the right to perform or observe all associated analyses.

(f) The original or a photocopy of the raw field data generated during the test series shall be provided to the department observer upon request if ~~such~~ **the** request may be reasonably met under the existing circumstances.

\*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Air Pollution Control Board; [326 IAC 3-6-3](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2073; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1567; filed Aug 26, 2004, 11:30 a.m.: 28 IR 37)

SECTION 15. [326 IAC 3-6-4](#) IS AMENDED TO READ AS FOLLOWS:

### **[326 IAC 3-6-4](#) Reporting**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 4. (a) All emission tests for which a **test protocol form** was submitted ~~pursuant to the department under~~ section 2 of this rule shall be reported to the department in the form of an emission test report containing the following information:

- (1) The reported testing methods and results certified as true and accurate and in compliance with this rule by the person responsible for conducting the emissions test.
- (2) Information regarding the test, including the following:

**(A) A stack test result summary table that compares the measured emissions, in units consistent with the applicable emissions limitations, to the emissions limitations.**

~~(A)~~ **(B)** A description of the ~~facility or facilities~~ **emissions unit or units** being tested.

~~(B)~~ **(C)** The date or dates on which the test was performed.

~~(C)~~ **(D)** The type of tests conducted.

~~(D)~~ **(E)** The type of process and control equipment utilized.

~~(E)~~ **(F)** The source name and location.

~~(F)~~ **(G)** The purpose of the tests.

~~(G)~~ **(H)** The test participants and their titles.

- (3) Tabulated data and results, including the following:

(A) The process weight rate or heat input rate.

(B) The referenced or derived conversion factors.

(C) The stack gas flow rate.

(D) Measured emissions given in units consistent with the applicable emission limitations.

**(E) The average value of emissions from any continuous gaseous emissions monitoring system in units consistent with the applicable emission limitations if applicable to the pollutant being tested.**

~~(E)~~ **(F) If applicable**, visible emissions observations or six (6) minute average continuous opacity monitor readings.

~~(F)~~ **Average value of emissions from any continuous gaseous emissions monitoring system in units consistent with the applicable emission limitations if applicable to the pollutant being tested.**

- (4) A description of process and control devices, including the following:

(A) A process flow diagram.

(B) The maximum design capacities.

(C) A fuel analysis and heat value for heat input rate determinations.

(D) The process and control equipment operating conditions.

(E) A discussion of variations from normal plant operations.

(F) The stack height.

(G) The exit diameter.

- (H) The volumetric flow rate (cubic feet per minute).
- (I) The exit temperature.
- (J) The exit velocity.
- (5) A description of sampling methods used, including the following:
  - (A) A brief discussion of the analytical procedures with justifications for any variance from reference method procedures.
  - (B) Specification of the following:
    - (i) The number of sampling points.
    - (ii) The time per point.
    - (iii) The total sampling time per run.
  - (C) A cross-sectional diagram of the sampling site showing sampling points.
  - (D) A diagram showing the following:
    - (i) The stack dimensions.
    - (ii) The sampling location.
    - (iii) The distance from the nearest flow disturbance upstream and downstream of the sampling points.
    - (iv) The diagram of the sampling train.
- (6) Sampling and analytical procedures used, including the following:
  - (A) Results and calculations, including the following:
    - (i) Units consistent with the applicable emission limitation.
    - (ii) One (1) complete calculation using actual data for each type of test performed.
    - (iii) Raw production data signed by the source official.
    - (iv) Photocopies of all actual field data.
  - (B) A laboratory report, including the following:
    - (i) The chain of custody.
    - (ii) Copies of all calibration data for equipment used in sampling as described in section 3(d) of this rule.
  - (C) Applicable rules and regulations showing the emission limitations.
  - (D) ~~For particulate matter tests;~~ **If applicable**, copies of visible emissions evaluations or opacity monitor readings.
  - (E) Copies of any continuous gaseous emissions monitoring system readings for gaseous pollutant tests.

(b) **The owner or operator of a source or emissions unit shall submit** all emission test reports ~~must be received by~~ to the department not later than forty-five (45) days after the completion of the testing. An extension may be granted by the department if the **owner or operator of the source or emissions unit** submits to the department a reasonable written explanation for the requested extension not later than five (5) days prior to the end of the initial forty-five (45) day period.

(Air Pollution Control Board; [326 IAC 3-6-4](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2073)

SECTION 16. [326 IAC 3-6-5](#) IS AMENDED TO READ AS FOLLOWS:

**[326 IAC 3-6-5](#) Specific testing procedures; particulate matter; PM<sub>10</sub>; PM<sub>2.5</sub>; sulfur dioxide; nitrogen oxides; volatile organic compounds**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 5. (a) **Tests for particulate matter tests (PM), PM<sub>10</sub>, and PM<sub>2.5</sub>** shall be conducted in accordance with the following procedures:

- (1) **For PM:** 40 CFR 60, Appendix A, Method 5\*, 5A\*, 5B\*, 5C\*, 5D\*, 5E\*, or 5F\*, **or Method 17\***, as applicable, or other procedures approved by the department **and U.S. EPA.**
- (2) **For PM<sub>10</sub> and PM<sub>2.5</sub>:** 40 CFR 51, Appendix M, Method 201\* or 201A\*, and 202\*. The measurement of condensible PM<sub>10</sub> using the procedures described in Method 202\* is not required if the applicable emission limitation is contained at [326 IAC 6.8-2](#), unless otherwise specified by [326 IAC 6.5](#) or [326 IAC 6.8](#). 40 CFR 60, Appendix A, Method 5\*, in conjunction with Method 202\*, may also be used, subject to the approval of the department and U.S. EPA. Other procedures to measure PM<sub>10</sub> and PM<sub>2.5</sub> may be approved by the department and U.S. EPA.
- ~~(2)~~ (3) Visible emissions (VE) evaluations shall be performed in conjunction with a ~~particulate emissions PM, PM<sub>10</sub>, PM<sub>2.5</sub>,~~ **or other mass emission rate test of air pollutants, as required by the department. The VE evaluations shall be conducted** by a qualified observer in accordance with the procedures contained in [326](#)



**IAC 5-1-4.** VE readings shall be continuously recorded for at least thirty (30) minutes per hour of sampling time for each sampling repetition, **unless a longer time is otherwise mandated by federal regulation.** A waiver from this requirement may be granted by the ~~on-site department staff person~~ **or on-site department staff person** if adverse conditions exist that would invalidate the VE readings. **Waivers from this requirement may be granted by the department for emissions units operating with a PM CEMS.** Complete waivers from the requirement to conduct VE readings during a compliance test may not be granted to facilities for the emissions unit required to complete opacity testing pursuant to 40 CFR 60.8\* **or 40 CFR 63.**

Facilities **Emissions units** equipped with continuous opacity monitors may submit the six (6) minute integrated readings of ~~such the~~ monitors during the sampling period, instead of performing VE evaluations, provided:

(A) the monitoring system meets the performance specifications as specified in 40 CFR 60, Appendix B\*, and is, or will be, certified by the department; ~~and~~

(B) the monitor readings submitted with the test include a zero (0) and upscale calibration check before the first test run and following the end of the final run; **and**

**(C) if more than one (1) day of testing is required to complete the three (3) runs, the zero (0) and span checks shall be performed at the beginning of each day's testing and at the conclusion of each day's final run.**

~~(3)~~ **(4)** At least three (3) repetitions of the test shall be performed under consistent ~~facility~~ **emissions unit** operating conditions unless otherwise allowed by the department. For boiler emissions testing, at least one (1) of the three (3) repetitions shall be conducted during a normal sootblowing cycle that is consistent with frequency and duration normally experienced.

~~(4)~~ **(5)** At Richmond Power and Light's Whitewater Generating Station, when sootblowing occurs during one (1) of the three (3) repetitions, emission test results shall be evaluated using either a time weighted averaging period (TWAP) or a straight averaging technique. When using TWAP, the following equation shall be used to ensure proper weighting of an intermittent cleaning cycle performance test run regardless of the length of the cleaning cycle and regardless of the number and duration of the test runs made on the unit. When using TWAP, the representative pounds per hour of particulate emissions shall be calculated using the following equation:

$$E = E_{cc} \frac{(A + B)}{AR} S + E_{ncc} \frac{(R - S)}{R} - \frac{BS}{AR}$$

Where: E = Pounds per hour of particulate emissions.

E<sub>cc</sub> = Average E of sample containing cleaning cycle.

E<sub>ncc</sub> = Average E of sample containing no cleaning cycle.

A = Hours of cleaning cycle operation during sample.

B = Hours with no cleaning cycle operation during sample.

R = Average hours of operation per twenty-four (24) hours.

S = Average hours of cleaning cycle operation per twenty-four (24) hours.

~~(5)~~ **(6)** Only those fuels representative of normal fuel quality used during normal operations shall be combusted.

~~(6)~~ **(7)** During each repetition, each sampling point shall be sampled for a minimum of two (2) minutes.

~~(7)~~ **(8)** The total test time per repetition shall be no less than sixty (60) minutes.

~~(8)~~ **(9)** The total sample volume per repetition shall be no less than thirty (30) dry standard cubic feet (dscf).

~~(9)~~ **(10)** The total particulate weight collected from the sampling nozzle, probe, cyclone (if used), filter holder (front half), filter, ~~and~~ connecting glassware, **and, if required in subdivision (2), the impinger catch,** shall be reported to the department **and U.S. EPA.** ~~Particulate analysis of the impinger catch is not required, unless specified by the department.~~

(b) **The owner or operator shall conduct** sulfur dioxide (SO<sub>2</sub>) tests ~~shall be conducted~~ in accordance with the following procedures:

(1) 40 CFR 60, Appendix A, Method 6\*, 6A\*, ~~or~~ 6C\*, or 8\*, as applicable, or other procedures approved by the department **and U.S. EPA.**

(2) At least three (3) repetitions of two (2) samples, each according to 40 CFR 60, Appendix A, Method 6\* **or** 6A\*, ~~or 6C\*~~, or three (3) repetitions according to 40 CFR 60, Appendix A, Method **6C\* or 8\***, performed under identical ~~facility~~ **emissions unit** operating conditions, shall constitute a test. For boiler emissions testing, only those fuels representative of fuel quality during normal operations shall be combusted.

~~(3) During each of the repetitions for 40 CFR 60, Appendix A, Method 8\*, each sampling point shall be~~

~~sampled for a minimum of two (2) minutes.~~

~~(4) (3)~~ The total test time per repetition shall be as follows:

(A) For tests using 40 CFR 60, Appendix A, Method 6\* ~~or 6A\*~~, ~~or 6C\*~~, a minimum of twenty (20) minutes per run with a thirty (30) minute interval between each run.

**(B) For tests using 40 CFR 60, Appendix A, Method 6C\*, a minimum of sixty (60) minutes per run.**

~~(B) (C)~~ For tests using 40 CFR 60, Appendix A, Method 8\*, a minimum of sixty (60) minutes per run, **with the following criteria:**

**(i) During each of the repetitions, each sampling point shall be sampled for a minimum of two (2) minutes.**

~~(5) (ii)~~ The total sample volume per repetition under ~~40 CFR 60, Appendix A, Method 8\*~~, shall be no less than forty (40) dry standard cubic feet (dscf).

**(iii) During each of the repetitions, the sample rate shall not exceed one (1) cubic foot per minute (cfm).**

(c) **The owner or operator shall conduct** nitrogen oxide (NO<sub>x</sub>) tests ~~shall be conducted~~ according to the following procedures:

(1) 40 CFR 60, Appendix A, Method 7\*, 7A\*, 7B\*, 7C\*, or 7E\*, as applicable, or other procedures approved by the department **and U.S. EPA.**

(2) **For Methods 7\*, 7A\*, 7B\*, or 7C\***, at least three (3) repetitions of four (4) samples each shall constitute a test.

**(3) For Method 7E\*, three (3) test runs, each a minimum of sixty (60) minutes, shall constitute a test.**

(d) **The owner or operator shall conduct** volatile organic compounds (VOC) emissions tests ~~shall be conducted~~ in accordance with the following procedures:

(1) 40 CFR 60, Appendix A, Method 25\*, or other procedures approved by the department **and U.S. EPA**, shall be used for the total nonmethane organic emissions.

(2) At least three (3) samples shall be collected and analyzed.

(3) The total test time per repetition shall be a minimum of sixty (60) minutes.

**(4) Bulk gasoline terminals subject to [326 IAC 20-10](#) shall be tested in accordance with 40 CFR 63, Subpart R\*. All other bulk gasoline terminals shall be tested in accordance with the New Source Performance Standards (NSPS) at 40 CFR 60, Subpart XX\*. During all compliance tests, 40 CFR 60, Appendix A, Method 21\* shall be used for determining whether there are any leaks from the hatches or flanges of the gasoline transports. If any leak is detected, the transport shall not be used for the capacity of the compliance test of the bulk gasoline terminal. The threshold for leaks shall be as follows:**

**(A) Five hundred (500) parts per million methane for all bulk gasoline terminals subject to 40 CFR 63, Subpart R\*.**

**(B) Ten thousand (10,000) parts per million (as methane) for all bulk gasoline terminals subject to 40 CFR 60, Subpart XX\* and for all other bulk gasoline terminals.**

\*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Air Pollution Control Board; [326 IAC 3-6-5](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2074; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1567; filed Aug 26, 2004, 11:30 a.m.: 28 IR 37)

SECTION 17. [326 IAC 3-6-6](#) IS ADDED TO READ AS FOLLOWS:

#### **[326 IAC 3-6-6](#) Test invalidation**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

**Sec. 6. Based on the department's evaluation, any test series or test run may be considered invalid or unacceptable for any of the following reasons:**

**(1) Failure to do any of the following:**

- (A) Follow the approved protocol and adhere to any procedure or requirement of the approved method or other protocol conditions approved or required by the department.
  - (B) Demonstrate or comply with reference methods' quality assurance and quality control (QA/QC) requirements.
  - (C) Provide or report the required data in order for the department to complete the review of the test conditions, specifications, and results.
- (2) Use of nonrepresentative process or operating conditions or control device operation.
- (3) Observation of fugitive emissions from the emissions unit or associated capture or control system being tested by the department or authorized representative.

(Air Pollution Control Board; [326 IAC 3-6-6](#))

SECTION 18. [326 IAC 3-7-1](#) IS AMENDED TO READ AS FOLLOWS:

#### [326 IAC 3-7-1](#) Applicability

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 1. This rule applies to fuel sampling and analysis **that is** performed to determine compliance with the emission limitations specified in [326 IAC 7](#).

(Air Pollution Control Board; [326 IAC 3-7-1](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2075; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

SECTION 19. [326 IAC 3-7-2](#) IS AMENDED TO READ AS FOLLOWS:

#### [326 IAC 3-7-2](#) Coal sampling and analysis methods

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 2. (a) Owners or operators of coal sampling systems for sources with total coal-fired capacity greater than or equal to one thousand five hundred (1,500) million British thermal units ~~(Btus)~~ **(Btu)** per hour actual heat input shall follow procedures specified in ASTM D2234-89\*, "Standard Methods for Collection of a Gross Sample of Coal", unless otherwise provided in section 3 of this rule. Additionally, the coal sampling system shall meet the following requirements:

- (1) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the ~~facility or facilities~~ **emissions unit** may be obtained. A single as-bunkered sampling station may be used to represent the coal to be combusted by multiple ~~facilities~~ **emissions units** using the same stockpile feed system.
- (2) The increment collection method **to be used** is specified in ASTM D2234-89\*, Table 1, I-A-1, I-B-1, or I-C-1.
- (3) The opening of the sampling device shall be at least two and one-half (2.5) times the top-size of the coal and not less than one and one-fourth (1.25) inches.
- (4) The sampling device shall have sufficient capacity to completely retain or entirely pass the increment without loss or spillage.
- (5) The velocity with which the cross-stream cutting instrument travels through the stream shall not exceed eighteen (18) inches per second. The velocity requirement shall not apply to a swing-arm sampler or to a sampler whose cutter opening is perpendicular to the stream of coal. Owners or operators of all coal sampling systems shall detail the proper operating procedures in the standard operating procedures document required under section 5 of this rule.
- (6) Increments obtained during the sampling period shall be protected from changes in composition to maintain the integrity of constituent characteristics required to convert sample sulfur content to units of the applicable emission standard.
- (7) A comparison of weight or volume of collected sample with that of the total flow of coal shall be conducted at a minimum of one (1) time every two (2) weeks to assure a constant sampling ratio is maintained for increments composited into a sample representing a single twenty-four (24) hour period.
- (8) A routine inspection of the sampling system shall be established to meet requirements and guidelines

specified in ASTM D4702-87\*, "Guide for Inspecting Mechanical Coal Sampling Systems that Use Cross-Cut Sample Cutters for Conformance with Current ASTM Methods".

(9) Composite samples shall be collected for analysis at a minimum of one (1) time per twenty-four (24) hour period.

(b) Owners or operators of coal sampling systems for sources with total coal-fired capacity between one hundred (100) and one thousand five hundred (1,500) million ~~Btus~~ Btu per hour actual heat input shall comply with requirements: ~~specified as follows:~~

(1) in subsection (a);

(2) in section 3 of this rule; or

(3) shall meet the following minimum requirements:

(A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the ~~facility or facilities~~ **emissions unit** may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple ~~facilities~~ **emissions units** using the same stockpile feed system.

(B) Coal shall be sampled at least three (3) times per day and at least one (1) time per eight (8) hour period unless no coal is bunkered during the preceding eight (8) hour period.

(C) Minimum sample size shall be five hundred (500) grams.

(D) Samples shall be composited and analyzed at the end of each calendar month.

(c) Coal samples shall be prepared for analysis in accordance with procedures specified in ASTM D2013-86\*, "Standard Method of Preparing Coal Samples for Analysis". The preparation of samples shall meet the following requirements:

(1) Samples shall be prepared in accordance with ASTM D2013-86\*, Procedure A or Procedure B.

(2) Sample preparation shall be checked at weekly intervals by performing a split sample of the twenty-four (24) hour composite sample and preparing and analyzing these two (2) identically.

(d) The heat content of coal samples shall be determined in accordance with procedures specified in ASTM D2015-95\*, "Standard Test Method for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter", or ASTM D3286-91A\*, "Standard Test Method for Gross Calorific Value of Coal and Coke by the Isothermal Jacket Bomb Calorimeter". Restandardization requirements in Section 11 of both methods shall be followed. Precision requirements for repeatability shall be verified according to Section 16.1.1 of both methods at a minimum of once per week.

(e) The sulfur content of coal samples shall be determined according to procedures specified in ASTM D3177-89\*, "Standard Test Methods for Total Sulfur in the Analysis Sample of Coal and Coke", or ASTM D4239-94\*, "Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods". Precision requirements for repeatability shall be verified according to ASTM D3177-89\*, Section 13, or ASTM D4239-94, Section 18\*, at a minimum of one (1) time per week. The laboratory that performs the analysis shall participate in an interlaboratory audit program using coal samples supplied by the department.

(f) ~~Compliance with this section is required unless a source owner or operator demonstrates to The department that~~ **may approve minor** modifications to the coal sampling and analysis procedures at a source **upon demonstration by the source owner or operator that the minor modifications** are necessary to meet the requirements of this section.

\*These documents are incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Air Pollution Control Board; [326 IAC 3-7-2](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2075; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1567; filed Aug 26, 2004, 11:30 a.m.: 28 IR 38)

SECTION 20. [326 IAC 3-7-3](#) IS AMENDED TO READ AS FOLLOWS:

**[326 IAC 3-7-3](#) Alternative coal sampling and analysis methods**



Sec. 3. (a) As an alternative to the coal sampling and analysis procedures in section 2 of this rule, a source owner or operator may use manual or other non-ASTM automatic sampling and analysis procedures upon a demonstration **as described in subsection (b)**, submitted to **and approved by** the department ~~for approval~~, and **U.S. EPA** that ~~such~~ the procedures provide sulfur dioxide emission estimates representative either of estimates based on coal sampling and analysis procedures specified in section 2 of this rule or of continuous emissions monitoring. ~~The demonstration shall consist of one (1) or more of the following methods:~~

~~(1)~~ **(b) For the demonstration described in this section**, a source owner or operator may submit documentation of procedures and results of a stopped-belt bias test or other comparisons between a sampling system meeting the requirements of section 2 of this rule and those methods and procedures proposed by the source owner or operator. A stopped-belt bias test and a sampling system meeting the requirements of section 2 of this rule shall be considered reference method systems. A comparison shall utilize a series of at least twenty-five (25) reference method system samples paired with nonreference method system samples and analyzed for the percent of sulfur content to determine the presence of significant systemic error. The detection of significant systemic error shall be based on the application of a statistical test (t-test) to determine if there is a difference between the reference and nonreference systems at the ninety-five percent (95%) confidence level, according to the following formula:

$$t = \frac{d\sqrt{n}}{Sd}$$

Where:      t      =      Calculated t value.  
                  d      =      Average difference between paired data.  
                  Sd      =      Standard deviation of the differences.  
                  N      =      Number of paired data sets.

The calculated t value is compared to the t value in the standard statistical t tables at the ninety-five percent (95%) probability and the appropriate degrees of freedom (n - 1). If the calculated t value is greater than or equal to the value of t in the t table, then the systems are not comparable. Certain coals with low variability may detect a small bias, which may be acceptable as decided on a case-by-case basis. This method tests for positive and negative bias. Provisions for testing only for a negative bias that would cause a source **owner or operator** to report less than actual values may be acceptable if supported by statistical tests. Upon request, the department shall provide written guidance to a source owner or operator as to the procedures to be followed in conducting this comparison. ~~(2) Other procedures may be acceptable if submitted to the department for approval and the department approves.~~

~~(b)~~ **(c)** The demonstration ~~provided~~ **described in subsection (a) this section** shall be repeated upon any significant change to the coal sampling procedures or upon notification by the department that a new demonstration is necessary. If the department has reason to doubt that the alternative sampling and analysis procedures are comparable to methods and procedures provided in section 2 of this rule, based on:

- (1)** inspections;
- (2)** monitoring;
- (3)** quality assurance data; or
- (4)** other information;

the department may notify the owner or operator that the demonstration shall be repeated. Written notification by the department of the request shall be made to the source owner or operator allowing at least sixty (60) days to schedule the demonstration.

(Air Pollution Control Board; [326 IAC 3-7-3](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2077; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

SECTION 21. [326 IAC 3-7-4](#) IS AMENDED TO READ AS FOLLOWS:

### **[326 IAC 3-7-4](#) Fuel oil sampling; analysis methods**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 4. (a) **The source owner or operator shall perform** sampling and analysis of the sulfur content of fuel oil ~~shall be performed~~ in accordance with the following ASTM procedures:

- (1) Collection of fuel oil samples shall be conducted according to either of the following:
  - (A) ASTM D4057-88\*, "Standard Practice for Manual Sampling of Petroleum and Petroleum Products".
  - (B) ASTM D4177-82\*, "Standard Method for Automatic Sampling of Petroleum and Petroleum Products".
- (2) Determination of sulfur content shall be conducted according to any of the following:
  - (A) ASTM D129-95\*, "Standard Test Method for Sulfur in Petroleum Products (General Bomb Method)".
  - (B) ASTM D1266-91\*, "Standard Test Method for Sulfur in Petroleum Products (Lamp Method)".
  - (C) ASTM D1552-95\*, "Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method)".
  - (D) ASTM D2622-94\*, "Standard Test Method for Sulfur in Petroleum Products (X-Ray Spectrographic Method)".
- (3) Determination of heat content shall be conducted according to ASTM D240-92\*, "Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter".

(b) ~~An~~ **A source** owner or operator may, with the prior **written** approval of the department **and U.S. EPA**, modify the procedures specified in subsection (a), use alternate equivalent procedures, or rely upon equivalent sampling and analysis procedures performed by the vendor prior to delivery of the fuel oil to the owner or operator.

\*These documents are incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Air Pollution Control Board; [326 IAC 3-7-4](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2077; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1567; filed Aug 26, 2004, 11:30 a.m.: 28 IR 40)

SECTION 22. [326 IAC 3-7-5](#) IS AMENDED TO READ AS FOLLOWS:

**[326 IAC 3-7-5](#) Record keeping requirements; standard operating procedures**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-14-4-3](#); [IC 13-15](#); [IC 13-17](#)

Sec. 5. (a) Owners or operators of sources with total coal-fired capacity greater than or equal to one hundred (100) million British thermal units per hour actual heat input shall develop a standard operating procedure (SOP) to be followed for:

- (1) sampling;
- (2) handling;
- (3) analysis;
- (4) quality control;
- (5) quality assurance; and
- (6) data reporting of the information collected pursuant to ~~under~~ sections 2 through 4 of this rule.

In addition, any revision to the SOP shall be ~~submitted to~~ **maintained by the source and made available upon request by** the department.

**(b) Owner or operators of emissions units using CEMS for compliance that do not use coal sampling and analysis as a backup when the CEM is not in use do not need to have a SOP.**

~~(b)~~ **(c) The owner or operator of a source or emissions unit subject to this rule** shall maintain records sufficient to verify compliance with the procedures specified in sections 2 through 4 of this rule. Records shall be:

- ~~(1)~~ **(1)** maintained for a period of five (5) years; and ~~shall be~~
- ~~(2)~~ **(2)** made available upon request by the department.

The department may at any time perform a systems audit to determine compliance with the requirements in sections 2 through 4 of this rule. Audit procedures shall be submitted to the owner or operator of a fuel sampling and analysis system subject to audit prior to conducting such the audit.

(Air Pollution Control Board; [326 IAC 3-7-5](#); filed Jan 30, 1998, 4:00 p.m.: 21 IR 2078; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

SECTION 23. [326 IAC 7-2-1](#) IS AMENDED TO READ AS FOLLOWS:

**[326 IAC 7-2-1](#) Reporting requirements; methods to determine compliance**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-14-8](#); [IC 13-15](#); [IC 13-17](#)

Sec. 1. (a) As used in this article, "weighting factor" means the daily quantity of coal bunkered or megawatt generation or other appropriate measure of the output of a combustion source.

(b) As used in this article, "rolling weighted average sulfur dioxide emission rate" means the summation of the average sulfur dioxide emission rate times the daily weighting factor divided by the summation of the weighting factors.

(c) Owners or operators of sources or emissions units subject to [326 IAC 7-1.1](#), [326 IAC 7-4](#), or [326 IAC 7-4.1](#) shall submit to the commissioner the following reports based on fuel sampling and analysis data obtained in accordance with procedures specified under [326 IAC 3-7](#):

(1) Fuel combustion sources with total coal-fired heat input capacity greater than or equal to one thousand five hundred (1,500) million British thermal units (MMBtu) per hour shall submit quarterly reports of the thirty (30) day rolling weighted average sulfur dioxide emission rate in pounds per MMBtu. Records of the daily average coal sulfur content, coal heat content, weighting factor, and daily average sulfur dioxide emission rate in pounds per MMBtu shall be submitted to the department in the quarterly report and maintained by the source owner or operator for a period of at least two (2) years.

(2) Fuel combustion sources with total coal-fired heat input capacity greater than one hundred (100) and less than one thousand five hundred (1,500) MMBtu per hour shall submit quarterly reports of the calendar month average coal sulfur content, coal heat content, and sulfur dioxide emission rate in pounds per MMBtu and the total monthly coal consumption.

(3) All other fuel combustion sources shall submit reports of calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate in pounds per MMBtu upon request.

~~(d) Compliance or noncompliance with the emission limitations contained in [326 IAC 7-1.1](#), [326 IAC 7-4](#), or [326 IAC 7-4.1](#) may be determined by a stack test conducted in accordance with [326 IAC 3-6](#) utilizing procedures outlined in 40 CFR 60, Appendix A, Method 6\*, 6A\*, 6C\*, or 8\*.~~

~~(e) (d) Fuel sampling and analysis data shall be collected pursuant to the procedures specified in [326 IAC 3-7-2](#) or [326 IAC 3-7-3](#) for coal combustion or [326 IAC 3-7-4](#) for oil combustion. and these data may be used to determine compliance or noncompliance with the emission limitations contained in [326 IAC 7-1.1](#), [326 IAC 7-4](#), or [326 IAC 7-4.1](#). Computation of calculated sulfur dioxide emission rates from fuel sampling and analysis data shall be based on the emission factors contained in U.S. EPA publication AP-42\* unless other emission factors based on site-specific sulfur dioxide measurements are approved by the commissioner and the U.S. EPA. Fuel sampling and analysis data shall be collected as follows:~~

~~(1) For coal-fired fuel combustion sources with heat input capacity greater than or equal to one thousand five hundred (1,500) MMBtu per hour, compliance or noncompliance shall be determined using a thirty (30) day rolling weighted average sulfur dioxide emission rate in pounds per MMBtu unless a shorter averaging time or alternate averaging methodology is specified for a source under this article.~~

~~(2) For all other combustion sources, compliance or noncompliance shall be determined using a calendar month average sulfur dioxide emission rate in pounds per MMBtu unless a shorter averaging time or alternate averaging methodology is specified for a source under this article.~~

~~(f) A determination of noncompliance under either the method specified in subsection (d) or (e) shall not be refuted by evidence of compliance under the other method.~~

~~(g) Upon written notification of an emissions unit owner or operator to the department, (e) Subsection (c)~~ **does not apply when** continuous emission monitoring data collected and reported under [326 IAC 3-5](#) ~~may be is~~ used as the means for determining compliance with the emission limitations in this article. ~~Upon such notification, the other requirements of this rule shall not apply.~~

**(f) Compliance or noncompliance with the emission limitations contained in [326 IAC 7-1.1](#) or [326 IAC 7-4](#) may be determined by an appropriate method as follows:**

- (1) A stack test conducted in accordance with [326 IAC 3-6](#) using procedures in 40 CFR 60, Appendix A, Method 6\*, 6A\*, 6C\*, or 8\*.**
- (2) A continuous emission monitoring system in accordance with [326 IAC 3-5](#).**
- (3) Source sampling in accordance with [326 IAC 3-6](#).**
- (4) Fuel sampling and analysis data collected in accordance with subsection (d) or [326 IAC 3-7](#).**
- (5) Other methods approved by the commissioner and U.S. EPA.**

\*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

*(Air Pollution Control Board; [326 IAC 7-2-1](#); filed Aug 28, 1990, 4:50 p.m.: 14 IR 52; filed Jan 30, 1998, 4:00 p.m.: 21 IR 2078; errata filed Feb 9, 1999, 4:06 p.m.: 22 IR 2006; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Nov 7, 2001, 3:00 p.m.: 25 IR 813; errata filed Dec 12, 2002, 3:30 p.m.: 26 IR 1565; filed Aug 26, 2004, 11:30 a.m.: 28 IR 42; filed May 25, 2005, 10:50 a.m.: 28 IR 2953)*

#### [Notice of Public Hearing](#)

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